A Lecture
ON
HERNIA OF THE UTERUS IN MEN AND WOMEN.*

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SURGEON TO THE MIDDLESEX HOSPITAL, AND SENIOR SURGEON TO THE CHELSEA HOSPITAL FOR WOMEN.

An eccentric old man, whose aches and pains were ascribed to hysteria by his doctor, made a curious will: he left his riches to his dear wife, and his womb to the doctor, *if he could find it*. Although the probabilities were against the doctor, his search might have been successful, as I will endeavour to prove. Observations in the wards and operating-rooms of the hospital have by this time taught you that almost any abdominal viscus may stray into the sac of an inguinal, or a femoral hernia. The common thing to occupy a hernial sac is a piece of omentum, or a loop of bowel; among uncommon things we may mention the vermiform appendix, the caecum, or a persistent vitello-intestinal duct; rarely, a pouch of the bladder, a loop of ureter, or the fundus of the gall bladder may be found in it It is the practice among surgical writers to denote by special terms the viscus which occupies the hernial sac. Thus, we have such names as "enterocele," "epiplocele," "cystocele," and the like. When some of the internal reproductive organs of girls or women are lodged in the sac of an inguinal or a femoral hernia, for example, the ovary, Fallopian tube, or the uterus, we employ the terms "oöphorocele," "salpingocele," and "hysterocele," or any combination of these names as the occasion demands. The great safety of modern operative surgery, especially in its application to the treatment of inguinal and femoral herniae, has led to a significant increase in the accuracy of our knowledge in regard to the contents of hernial sacs. Twenty years ago it was exceptional to perform operations on such herniae in children and infants; to-day it is the rule. We know that the sac of an inguinal hernia in female infants often contains some of the internal genitalia; usually it is the ovary, occasionally the tube and ovary. In exceptional cases the tube, the ovary, and the greater part of the uterus occupy the sac, sometimes accompanied by a loop of bowel or a piece of omentum. These displaced elements of the reproductive organs may become strangulated, or undergo axial rotation, and lead to acute symptoms demanding urgent surgical treatment. Many of the glandular bodies found in the sacs of inguinal herniae of infants, apparently girls, prove to be testes when they are examined microscopically.

In adult women it is exceptional to find representatives of the internal genitalia in hernial sacs, but they occur with sufficient frequency to lie outside the category of surgical curiosities. Hysteroceles occur at all ages—in infants, adults, and old women, in spinsters as well as mothers. In nearly all the published cases (and records of more than fifty are available) an operation was undertaken for the relief of an irreducible or a strangulated hernia, when, to the surprise of the surgeon, a uterus with one or both sets of its appendages have been found inside the sac; in many of these instances the uterus has been of normal size, but in some cases it was smaller than usual and occasionally malformed. A uterus occupying the sac of an inguinal hernia has become gravid, and when the pregnancy ripened the fetus was extracted by Caesarean section. Even in such ill-starred circumstances the fetus has survived although the patient lost her life.

The best known cases are those reported by Ledesma (1840) and Fischer (1842). Among recent cases may be mentioned one observed by Nores in Buenos Aires (1901); in this instance the greater part of the gravid uterus remained in the abdomen, but the legs of the fetus and the placenta were in that portion of the uterus which occupied the hernial sac. Delivery occurred spontaneously; the child was dead. There was difficulty in extracting the placenta, so Nores opened the hernial sac; it contained septic fluid. The woman survived the operation only two hours.

The rarity of hernia of the uterus has led several writers to play the part of case collectors. Among the various papers on this subject the monograph by Cranwell, of Buenos Aires, is the most complete.

During the last ten years some interesting cases of inguinal hysterocele have been published by Birnbaum, Andrews, Cranwell, Kellock, Jopson, and Rushton Parker. In all the reported cases of inguinal hysterectomy the operation has been performed under the impression that the women were suffering from an irreducible or a strangulated hernia, and in the course of the operation the surgeon has found the uterus in the hernial sac, sometimes alone, but occasionally accompanied by intestine. In a few cases, especially those reported in recent years, the herniated uterus has been removed with success (inguinal hysterectomy). Although the astonishment of the surgeon may be great on finding a uterus in the sac of an inguinal hernia in a woman, it would certainly be greater at finding a uterus in the sac of an inguinal hernia in a man. Bewildering it may be, but such things happen, as I will endeavour to show.

Men are sharply distinguished from women by what are known as the primary sexual characters. These are directly associated with the function of reproduction, and comprise in women the ovaries, the Fallopian tubes, and the uterus. The recognition of a boy or a girl depends entirely on a visual examination of the external genitalia. The presence of a penis and scrotum is accepted as a sufficient indication that the child is a boy, their absence leaves no doubt in the mind of the mother that her offspring is a girl, and on these signs the child is named accordingly. At the time of our nativity there is no other method available for determining sex. Later in life we have to consider what are known as secondary sexual characters; these are features which enable us to distinguish man and woman from each other irrespective of the organs of reproduction. Man possesses a beard and greater muscular development than a woman, greater physical strength, a more powerful voice, and often an abundant growth of coarse hair on the skin. The hair on his pubes passes upwards to the umbilicus, whereas in woman it is as a rule sharply restricted to the mons veneris. In adult men there is often a growth of long hair on the tragus.

Secondary sexual characters normally become manifest at puberty—by which term we signify reproductive maturity. In girls puberty is strikingly declared by the institution of menstruation and the development of the breasts (mammae). In boys it is indicated by a marked alteration in the voice due to enlargement of the thyroid cartilage and a corresponding increase in the length of the vocal cords, and the appearance of coarse hair on the lips and chin. Next to the possession of a penis, the most striking feature in the external genitalia of a male is the presence of testicles, one in each half of the scrotum, but these are not always present, and if a male child has a diminutive penis and an empty scrotum, the relatives, midwife, or doctor on occasions have their wits sorely taxed to decide with certainty its sex. This brings me to what I may call the core of my subject. The only true test of sex is the gonad or genital gland. The possession of ovaries indicates the female, and the presence of testes the male sex. The testes differ from the ovaries in an important particular, for under normal conditions the ovaries occupy a position in the pelvis, one on each side of the uterus, but each testis during fetal life descends from the renal region, passes down the inguinal canal, and takes up a position in the scrotum. The cause of this extraordinary migration of an abdominal organ, and even the actual forces which produce it, remain a mystery, although the matter has been made the subject of much investigation and still more inconclusive speculation. In some instances one or both testes fail to traverse the inguinal canal, they may even fail to enter it; but when this happens it is a certain indication that the gland is imperfect. In the early days of medicine, before the exact function of the ovaries was discovered, there could be no certain test for the determination of sex, and it came about that when an individual appeared with a diminutive penis and an empty scrotum, especially if the scrotum was incompletely closed in the middle line (hypospadic male with a perineo-scrotal fissure), and a

* Delivered at the Middlesex Hospital, October 5th, 1909.

rounded movable body occupied each inguinal canal, there would be much excitement and speculation as to the sex of the child. Such unfortunate individuals have been called from the earliest time hermaphrodites (Hermes and Aphrodite), and when they attained the pubic condition and assumed the secondary sexual characters, some of which belong to men and others to women, the difficulties of determining their sex were increased. It may seem strange when I tell you that no sure method of determining sex in doubtful cases was available until von Baer (1829) discovered the human ovum (egg), and thus established the nature of the ovary (ovarium). The change which this observation has wrought on theory and practice is enormous. It is now recognized that the testis is the distinguishing feature of a man, and the possession of an ovary the mark of a woman; and although it is true that among the *invertebrata* there are many animals in which it is normal for one to possess male and female reproductive organs in a functional condition (true hermaphrodism), there is no instance on record in which a human being has survived its birth possessing a conjoined functional ovary and testis (an ova-testis), or a perfect ovary on one side and a perfect testis on the other.

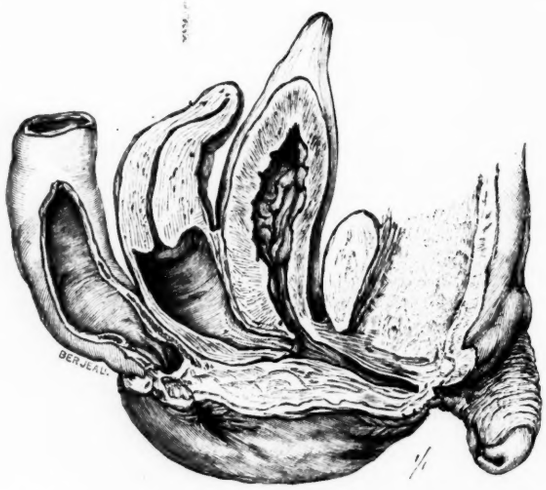

Fig. 1.—Internal genital organs of a male child, showing a uterus with a narrow vagina opening into the sinus pocularis.

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It is important to bear in mind that the secondary sexual characters are often useful aids in sex-determination. Berthold (Koenigsberg) was once examining the larynx of a patient, 22 years of age, dressed and educated as a woman. This organ so resembled that of a man as to make him suspicious of the sex. He cautiously made inquiries, and elicited that the genitalia were not normal. Subsequently it was ascertained that the genital glands furnished spermatozoa, and thus satisfactorily proved that the patient was a man.

It is not my intention to discuss at length the fascinating subject of hermaphrodism, although it is of absorbing interest to biologists. My self-imposed task is to show you that a man may possess a well-formed uterus. My interest in this matter began twenty years ago, for while dissecting a male fetus, born at the eighth month, I found a uterus (corresponding in shape and size to that of a female fetus of the same proportions and corresponding period of intrauterine life) behind the bladder, communicating by means of a small vagina with the urethra in the situation of the sinus pocularis. Each Fallopian tube passed from the uterus as a mere thread, and then expanded into a fringed ampulla as it entered the inguinal canal and joined an oval body, which proved on microscopical examination to be a testis, Fig. 1. The penis was small and hypospadic.

Stonham described a similar case in 1888, which occurred in a boy aged 9 months. This boy had a congenital inguinal hernia, and an attempt was made to cure this defect. When the sac was opened a uterus with Fallopian tubes and bodies, supposed to be ovaries, were found. The child died, and the parts were carefully dissected. The relations of the uterus and the glandular bodies are presented in Fig. 2. The genital glands were examined microscopically and found to be testes. In this specimen the vasa efferentia gradually lose themselves on the walls of the vagina. This appears to be the usual condition in such malformations.

For many years I have followed up this subject, and collected many instances in which men with incompletely developed external genital organs have been brought up as women, and late in life suffered from a strangulated hernia. In the course of an operation performed for its relief a genital gland of the shape and size of an ovary has been detected in the canal, sometimes associated with a Fallopian tube. When the supposed ovary has been removed and submitted to microscopical examination, the investigators have been astonished to find that it was a testis. It sometimes happens that herniotomy is performed on a child with normal female external genitalia, the surgeon removes a rounded glandular body from the inguinal canal which he believes to be an ovary, but on microscopical examination it proves to be a testis.

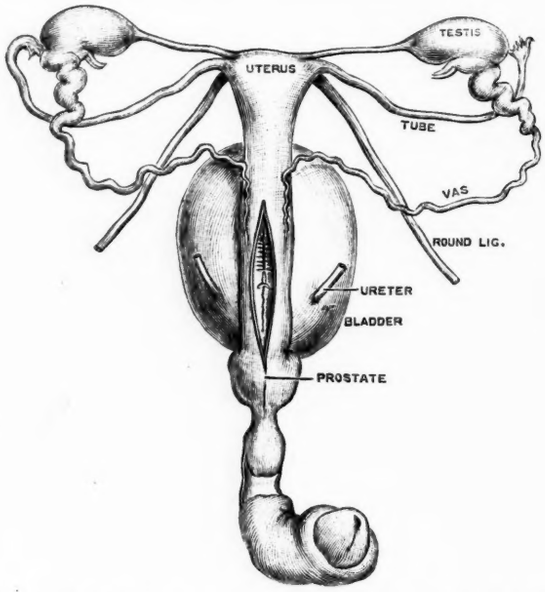

Fig. 2.—The internal genital organs of a boy, 9 months old. He had well-developed uterus and Fallopian tubes associated with testicles (after Stonham).

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Arnolds has observed and reported the description in detail of a man, aged 59, whose external genitals were well developed, though he was a cryptorchid at birth. At

the age of 15 a testicle appeared in the left inguinal canal; he was married at the age of 40 to a widow who had children by her first husband, but remained barren to this man, although there is reason to believe that he was potent. He came under Arnolds's care on account of a troublesome swelling in the left inguinal region about the size of a fist, which after careful consideration was thought to be a malignant tumour. This induced Arnolds to dissect it out in its sac entire. In the course of the operation a pedicle was found leading into the abdomen; this pedicle had a lumen. When the tumour was subsequently dissected it contained a well-developed bicornate uterus (uterus bicornis unicollis), with Fallopian tubes and genital glands occupying the position of ovaries, but on microscopical examination they were proved to be testes. The pedicle with the lumen prove to be the cervical canal.

Keiffer has described and figured a uterus removed from a hernial sac of a man who was the father of eight children. He argues that it looked like a uterus, but on microscopical examination it proved to be musculo-fibrous hypertrophy of the *utriculus prostaticus* with testicles and thickened spermatic cords. He states that so-called uteri in the male are of this nature. I cannot agree with him, for the *uterus masculinus* is developed from the same embryological structures, has the same shape and histological structure, even to the glands in the endometrium, as the female uterus. Moreover, I have satisfied myself from a critical examination of uteri removed from boys with normal testes, that such uteri are indistinguishable from those of girls of a corresponding age. The specimen represented in Fig. 3 is useful, for it serves to show that it is difficult, indeed impossible in some cases, to determine the nature of the sexual glands from a mere naked eye inspection. In this instance the external genital organs are those of a boy with undescended testes. The penis is normal in shape and size and the scrotum is apparently natural, but empty. Standing above the prostate is a uterus of the same size and shape as that of a girl of corresponding age and size. The genital glands occupy their proper relations to the Fallopian tubes, but they present the smooth ovoid contour of a testis rather than the elongated shape of an infant ovary. On microscopic examination the glands were found to be testes.

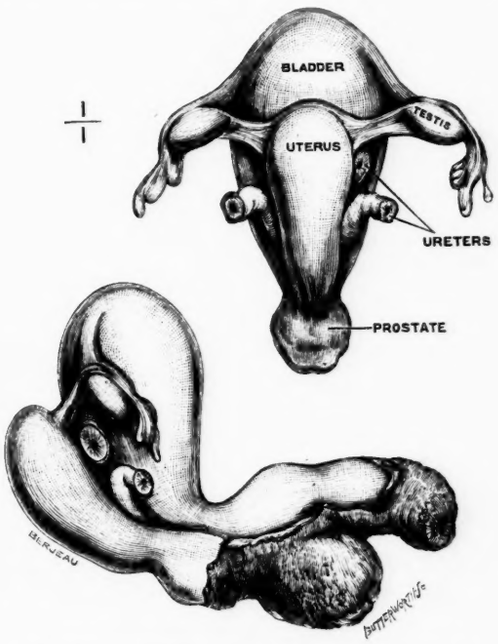

Fig. 3.—The internal and external genital organs of a boy, aged one month. He possessed a well-developed *uterus masculinus* associated with testes. The right kidney had two ureters.

Embryology teaches us that the mammalian embryo is potentially hermaphrodite. The differentiation of the primary germ mass into an ovary or a testis is followed by a corresponding development of the correlated sexual organs. Thus, when the ovary dominates, the Müllerian ducts develop into Fallopian tubes, uterus and vagina, and the external genitalia assume the female type. When the testis is the dominating organ, the Wolffian ducts become vasa deferentia, and the external genitalia develop into the elaborate organs characteristic of the male. Recent observations indicate that the full structural and functional development of either set of sexual organs, primary and secondary, require the full development of the dominant sexual organ (ovary or testis), and, if this be imperfect, the formation of the internal and external genitalia is imperfect also. This fact is in favour of the view that ovaries and testes furnish an internal secretion of great value during the development and growth of the body. What the force is which determines testicular or ovarian domination surpasses the wit of man to discover.

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Having placed before you the facts which I contend prove in the most positive manner that the uterus is not exclusively the property of women, I will now endeavour to explain to you how a uterus may occupy the scrotum.

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This alteration is coincident with the great change which takes place in the bony structures of the pelvis when girls become mature (or pubic). The experience of surgeons connected with hospitals, especially those hospitals concerned with diseases of children, teaches that it is quite common to meet with rounded bodies in the inguinal canals of female infants, and it may also be mentioned that in many instances in which it is deemed necessary, on account of strangulation or axial rotation of these bodies, to remove them, when the glandular body suspected to be an ovary is examined microscopically it is occasionally proved to be a testis. In all the cases of *uterus masculinus* which I have had opportunities of examining the testes were tethered to the uterine cornua by short cords; it is easily conceivable that when the spermatic glands attempt to obey the impulse which causes them to traverse the inguinal canals to reach their normal positions in the scrotum they drag the uterus with them. In connexion with this I think it is quite possible that in many instances in which the uterus is found occupying the sac of an inguinal hernia in women, and especially in female infants, a critical examination of the minute structure of the genital glands associated with

Fig. 4.—The pelvic organs of a female fetus at birth: to show the relation of the ovaries and Fallopian tubes to the inguinal canals.

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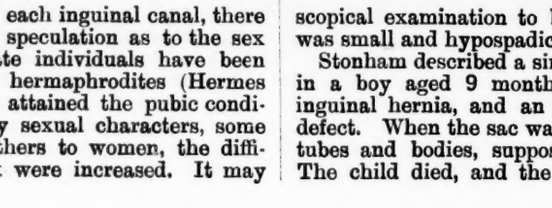

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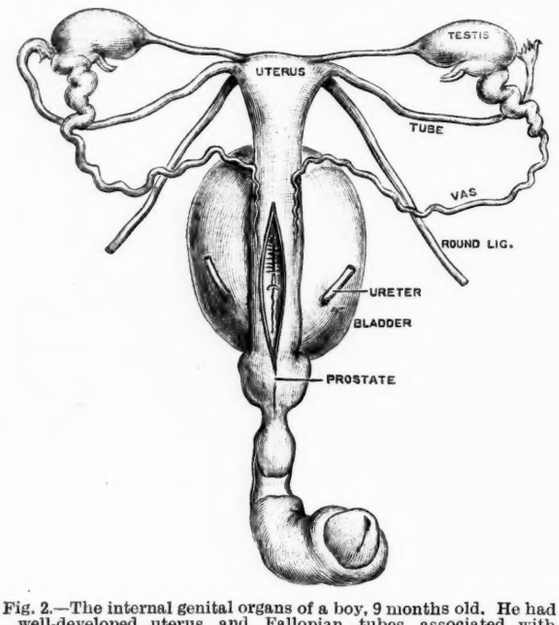

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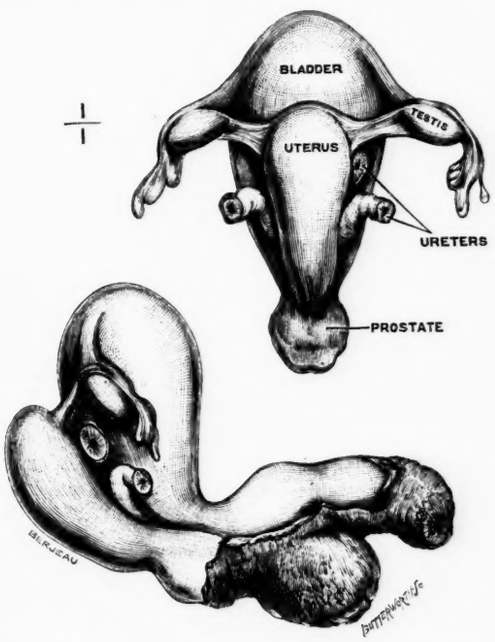

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This alteration is coincident with the great change which takes place in the bony structures of the pelvis when girls become mature (or pubic). The experience of surgeons connected with hospitals, especially those hospitals concerned with diseases of children, teaches that it is quite common to meet with rounded bodies in the inguinal canals of female infants, and it may also be mentioned that in many instances in which it is deemed necessary, on account of strangulation or axial rotation of these bodies, to remove them, when the glandular body suspected to be an ovary is examined microscopically it is occasionally proved to be a testis. In all the cases of *uterus masculinus* which I have had opportunities of examining the testes were tethered to the uterine cornua by short cords; it is easily conceivable that when the spermatic glands attempt to obey the impulse which causes them to traverse the inguinal canals to reach their normal positions in the scrotum they drag the uterus with them. In connexion with this I think it is quite possible that in many instances in which the uterus is found occupying the sac of an inguinal hernia in women, and especially in female infants, a critical examination of the minute structure of the genital glands associated with

it would, in many instances, show that they are really testes, though their shape might lead the surgeon to regard them as ovaries, and this in spite of the fact that the external genitalia were characteristically female in type.

It has long been known that horses, sheep, oxen, goats, and pigs, as well as cats and dogs, may be pseudo-hermaphrodites. All students of John Hunter's works know well the peculiar conditions of the reproductive organs which he described, and the specimens he set up (now preserved in the museum of the Royal College of Surgeons) under the farmer's title of "free-martins." Stock breeders are aware that "a cow calf twin-born with a bull calf is usually sterile"; it is known as a free-martin. This is a pseudohermaphrodite and possesses a uterus, but the genital glands (or gonads) are invariably testes.

Experience taught stock breeders long ago that animals with malformations of the external genitals are useless for breeding purposes, and they are, as a rule, fattened and utilized for food.

Although the subject of pseudo-hermaphrodism is profoundly interesting to the practical surgeon, it has never been properly considered from the standpoint of the alienist and jurist. To us to-day human ova and

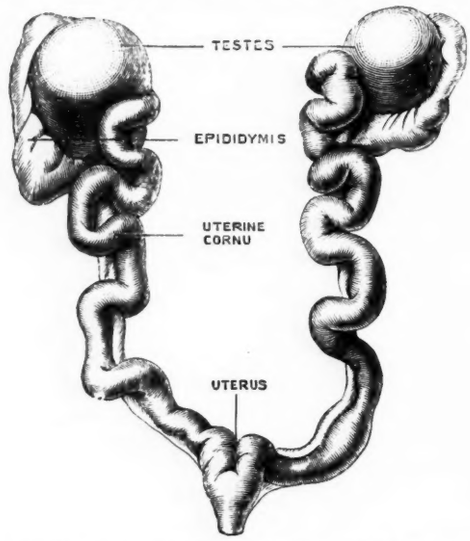

Fig. 5.—Uterus and testes from a pig; removed in the operation of spaying.

spermatozoa are as distinct realities as potatoes and gooseberries to the gardener; although Leeuwenhock's pupil Hamm discovered the spermatozoon in 1677, its real nature and importance was not established until Koelliker (1841) proved it to be a histological element of the testis, and furnished us with an unerring method of sex-determination.

That an individual with the external characters of a woman should possess testes is as startling as the fact that one with the fullest attributes of manhood should have a uterus in his pelvis or in the scrotum.

Pseudo-hermaphrodites sometimes contract marriages, rarely as men, usually as women. In some reported instances such unions have been attended with happiness.

Realizing that the external genitalia afford no positive indications of the nature of the internal genital organs, and especially the gonad (sexual gland), it is a fair assumption that some examples of sexual frigidity and sex perversion may be explained by the possibility that the individuals concerned may possess sexual glands opposite in character to those indicated by the external configuration of their bodies.

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ON THE INCREASE OF THE HAEMOLYTIC POWER OF SERUMS

RESULTING FROM THE EXPERIMENTAL INTRODUCTION OF ORGAN EXTRACTS DERIVED FROM OTHER ANIMALS OF THE SAME SPECIES.

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THE development of an increase of the normal haemolytic power of the serum of one animal by the introduction of extracts of the organs of another animal of a different species is well known. The object of the following experiments was to endeavour to demonstrate the development of a change in the serums of rabbits which had been injected with the organs of other rabbits, and, as the experiments will show, the plan adopted for the demonstration of this change was one in which use was made of a modification of the procedure introduced by Bordet and Gengou of fixation of the complement.

DETAILS OF THE PREPARATION OF THE AGENTS, ETC., USED.

1. *Emulsion of Red Corpuscles.*—Fresh sheep's blood was obtained, and the red corpuscles prepared in the usual way by whipping, centrifuging, and washing repeatedly in normal saline solution. A 5 per cent. emulsion was made up with a similar solution and stored in an ice box.

2. *Complement.*—The complement made use of was any small quantity which happened to be present in the rabbits' serums and the much more abundant supply to be obtained from the serum of guinea-pigs. The latter animal was anaesthetized and exsanguinated from the carotid artery, and, after whipping and centrifuging the blood, the serum was pipetted off and used in dilutions of 1 in 10 to 1 in 15.

3. *The Experimental Serums.*—Normal full-grown rabbits were exsanguinated under anaesthesia; the thoracic aorta was exposed and the abdominal viscera washed out with salt solution until the fluid returning through the inferior vena cava was free from blood; the liver and kidneys were then exposed, and if the latter, as frequently happened, were not completely washed free from blood, they were manipulated until this was secured. The organs were then removed, cut up finely, and ground into a pulp with pestle and mortar. The pulp was then dried over sulphuric acid in desiccators from which all air had been removed by an air-pump. Finally the dried tissue was ground up very finely and stored in an air-tight chamber over sulphuric acid. The time which elapsed between the death of the animal and the desiccation of the organs rarely exceeded four to five hours and often was much less.

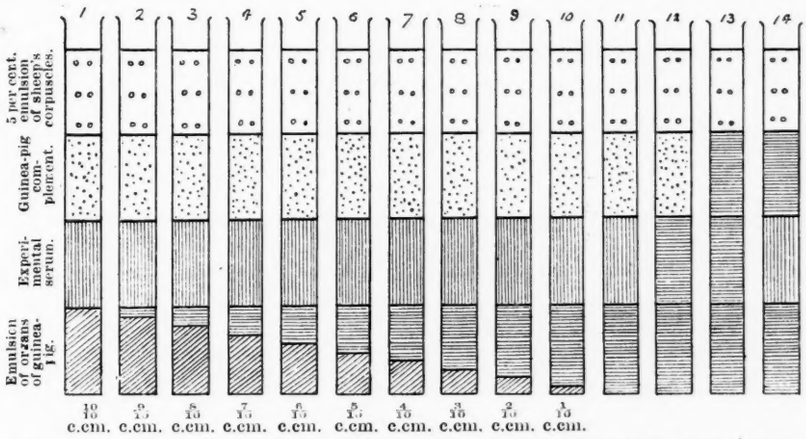
Normal adult rabbits were then injected repeatedly at intervals of a week or two with one-third to one gram of the dried organs made up with 10 c.cm. of normal salt solution, the same animal receiving on each occasion a dose of the same type of organ, either liver or kidney. The dose of organ emulsion was injected into the peritoneal cavity. Serums were obtained in the usual way from blood derived from the auricular vein; without inactivating them they were diluted—one part of serum to three or four of salt solution.

4. *Organ Extracts.*—The organs removed after thorough transfusion from the guinea-pigs which had been bled to supply the complement were used to make emulsions, 1 part of the desiccated organ to 30 up to 500 of salt solution. The emulsions were shaken for ten to fifteen minutes and then centrifuged to remove all coarse particles; the resulting emulsions were faintly opalescent. The variation from the Bordet-Gengou procedure already mentioned consisted in the use of extracts of guinea-pigs' organs instead of rabbits' organs, which were the antigens used in the production of the experimental serums.

All the above operations were carried out with aseptic precautions. The test tubes used in the subsequent stages of experiments were boiled in distilled water and heated to dryness. They were then numbered in groups of fourteen.

Plan of the Arrangement of the Constituents of the Fourteen Tubes which constituted each Series.

The accompanying diagram serves to explain the constituents of each tube; the horizontal shading indicates salt solution and each division of the test tube represents 1 c.cm. The decreasing quantity of organ emulsion used, from 1 c.cm. to $\frac{1}{10}$ c.cm., is indicated in tubes 1 to 10 by oblique shading.



Scheme of Tubes. (The horizontal markings indicate normal saline which has been added to complete the unit of volume, each unit amounting to 1 c.cm.)

The Experiments.

The general plan of the experiments is first given, and any further variations are already indicated subsequently under each experiment.

First Stage.

Into Tubes 1 to 10 were poured diminishing quantities of organ emulsion as already indicated, each of the tubes being made up to 1 c.cm. with salt solution.

Into Tube 11 was poured 1 c.cm. of salt solution, into Tube 12 2 c.cm. of salt solution, into Tube 13 3 c.cm., and into Tube 14 2 c.cm. of salt solution.

Tubes 1 to 11 then received 1 c.cm. of the diluted suspect serum under consideration, and Tube 14 1 c.cm. of the same serum.

Finally Tubes 1 to 12 received 1 c cm. of diluted guinea-pig serum.

The ingredients were well mixed by inversion and reinversion, and then were kept in an incubator for one hour at 37° C.

Second Stage.

To each of the fourteen tubes was added 1 c.cm. of emulsion of sheep's red corpuscles. The contents were again thoroughly mixed, and the tubes were again placed in the incubator at 37° C., this time for about two hours. They were then allowed to stand for twelve, twenty-four, to thirty-six hours at the room temperature, and readings were taken.

The quantities of the various ingredients were measured from graduated burettes.

The Estimation and Record of the Haemolytic Power of the Experimental Serums.

Complete haemolysis was indicated by the figure 10, lesser degrees by the figures 8, 6, 4, 2, 1, 0.8, 0.6, 0.4, 0 2, etc. Absence of haemolytic power was shown by a minus sign. In each case the degree of haemolysis was ascertained by the degree of coloration and checked by observing the amount of red cells which had escaped haemolysis and settled at the bottom of the tubes.

The observations were made independently by each of us, and any discrepancies were subjected to revision and adjustment by both together.

In the appended analyses of results, the observation will be noted "not done," either because it was not necessary to repeat an observation already made, or because the stock of one or other ingredient failed.

Explanation of the Objectives in View in the Individual Tubes.

Tube 11 serves to show the amount of haemolysis which can be effected by each serum upon which observation was made, whether experimental or normal, in the presence of the amount of complement operative in the rabbit and guinea-pig serums used. Tubes 1 to 10 show the effect upon the haemolyzing power of each serum in the presence of emulsions of various organs in varying strengths. Tube 12 is designed to show the degree of the haemolytic power of guinea-pig's serum alone, if any. Tube 13 is also a control, whereby it may be shown that normal salt solution alone does not lake the red cells. Tube 14 shows the degree of haemolysis which can be effected by the rabbits' serums alone by virtue of the haemolytic power which they possess independently of the help afforded by the guinea-pig's serum.

Experiment A.

The rabbits from which experimental serums were withdrawn were numbered 1, 2, 3, 4, 5, and their serums were similarly designated. Rabbits Nos. 1 and 3 were injected with rabbits' liver, and Rabbits Nos. 2, 4, and 5 with rabbits' kidney. Each animal had been injected with the same organ on a previous occasion, receiving the last injection two months previously. As the animals had remained in excellent condition it was thought they might be used again for similar injections.

In Experiment A the serums of Animals 3, 4, and 5 were used, and as a control the serum of a normal rabbit, No. 9. An injection of organ emulsion had been given to Rabbits 3, 4, and 5 six days previously. The organ emulsion used was one of kidney of the strength of 1 part of dried guinea-pig kidney to 150 of salt solution. This strength, which previous experiments had shown to be the most convenient, was used in all the remaining experiments. The strength of complement was 1 in 10.

No. of Tube.	Serum No. 3 (L.*).	Serum No. 4 (K.).	Serum No. 5 (K.).	Serum No. 9 (Normal).
1	0.2	—	2.0	—
2	0.2	—	2 2	—
3	0.2	—	2.2	—
4	2.2	—	4.0	—
5	2.2	2.0	4.0	—
6	2.2	2.0	4.0	—
7	6.0	2.0	4.0	0.2
8	8.0	4.0	6 0	0.2
9	8.0	6.2	8.0	0 4
10	8.0	8.0	8.0	2.4
11	8.0	8 0	8.0	2.6
12	0.6	(not done)	(not done)	(not done)
13	—	"	"	"
14	2.2	2.2	2.2	—

* This letter in brackets indicates the nature of the organ which had been injected into the anmials: Liver (L.), or kidney (K.).

Tube 11 show that each of the experimental serums has a greater haemolytic power than the normal serum. Tube 12 shows that the guinea-pig's serum may be accountable alone for but a very slight part of the effect. Tube 13 shows that salt solution alone does not lake the red corpuscles. Tubes 14 corroborate the results of Tubes 11, in that they show that the experimental serums without the help of the guinea-pig's serum can effect haemolysis, the normal serum under identical

circumstances having no power at all. Further, Tubes 1 to 10 show that the haemolytic powers of all the serums, experimental and normal, are reduced by the presence of organ emulsion.

Experiment B.

Serums were now drawn from two different experimental rabbits, Nos. 1 and 2, two days after a second injection of rabbit's organs, liver in Rabbit No. 1, and kidney in Rabbit No. 2. Control serums were drawn from two normal rabbits, Nos. 9 and 10. The strength of guinea-pig's serum was 1 in 11, but the guinea-pig organ emulsion (kidney) remained the same, 1 in 150.

No. of Tube.	Serum No. 1 (L.).	Serum No. 2 (K.).	Serum No. 9 (Normal).	Serum No. 10 (Normal).
1	(not done)	—	—	—
2	,,	—	—	—
3	,,	0.2	—	—
4	—	0.2	—	—
5	0.2	0.6	—	—
6	0.6	0.8	—	—
7	0.8	0.8	—	—
8	(not done)	4.0	—	—
9	,,	4.0	—	—
10	,,	6.0	0.2	0.2
11	8.0	8.0	0.4	0.2
12	—	(not done)	(not done)	(not done)
13	—	,,	,,	,,
14	2.0	4.0	—	—

Observations.

Tubes 11 again show that the serums of the experimental animals possess greater haemolytic power than either of the normal serums, and Tubes 14 corroborate the observation. Tube 12 indicates that no allowance need be made for the haemolytic power of the guinea-pig's serum used on this occasion, for it was *nil*. The checking effect of organ extract is again shown in Tubes 1 to 10 better in the case of Serum No. 2, because the series was more completely worked out.

Experiment C.

In this experiment further confirmation of the results of Experiments A and B was sought, and in addition an endeavour was made to estimate the relative capacity of different organs to check the haemolytic power of the experimental serums. With this object in view, organ emulsions of a strength of one part of desiccated tissue to 150 of salt solution were made not only of guinea-pig's kidney, but also of liver, heart, and spleen. The strength of the guinea-pig's serum was 1 in 15 and the experimental serums used were those of Rabbits Nos. 1 and 2 drawn a fortnight after the last injection of rabbit's organs.

No. of Tube.	Serum No. 1 (L.).				Serum No. 2 (K.)				Serum No. 9 (Normal).			
	Liver.	Kidney.	Heart.	Spleen.	Liver.	Kidney.	Heart.	Spleen.	Liver.	Kidney.	Heart.	Spleen.
1	0.2	—	—	—	?	—	—	—	—	—	—	—
2	0.4	—	—	—	0.2	—	—	—	—	—	—	—
3	0.6	—	—	—	0.4	—	—	—	—	—	—	—
4	0.8	—	—	—	0.6	—	—	—	0.2	—	—	—
5	1.0	—	—	—	0.8	—	—	—	0.4	—	—	—
6	2.0	—	—	—	2.0	—	—	—	0.6	—	—	—
7	2.2	—	—	—	2.2	—	—	—	0.6	—	—	—
8	4.0	—	—	—	2.4	—	—	—	0.8	—	—	—
9	6.0	—	—	—	4.2	—	—	—	1.0	—	—	—
10	8.0	—	0.6	0.4	6.0	—	0.2	0.4	1.0	—	—	—
11	8.0	(not done)	(not done)	(not done)	4.0	(not done)	(not done)	(not done)	2.0	(not done)	(not done)	(not done)
12	—	,,	,,	,,	—	,,	,,	,,	—	,,	,,	,,
13	—	,,	,,	,,	—	,,	,,	,,	—	,,	,,	,,
14	4.0	,,	,,	,,	0.2	,,	,,	,,	0.4	,,	,,	,,

Tubes 11 again show that the experimental serums possess a greater haemolytic power than the normal serum. No allowance is necessary for any disturbing power on the part of the guinea-pig serum (see Tubes 12). Apparently the haemolytic power of Serum No. 2 acting without guinea-pig's serum is not so great as the normal serum (Tubes 14).

It will also be observed that the checking powers of the organ emulsions differ somewhat; kidney emulsion appears under the circumstances of the experiment to be able to check haemolysis much more thoroughly than the others; then come heart and spleen in an intermediate position, and liver appears to have less power than the others. Even the normal haemolytic power of rabbit's serum can be negatived by kidney, heart, and spleen, using very low dilutions of the emulsions.

Experiment D.

This experiment was devised in order to test the last results upon a different pair of the experimental serums—Nos. 3 and 4—five days after the third injection of rabbit's organs. The strength of guinea-pig's serum used was 1 in 15. It was further felt advisable to make observations on the experimental serum of a rabbit which had received recently several injections of the washed red corpuscles of another rabbit, for

Experiment D.

No. of Tube.	Serum No. 3 (L.).				Serum No. 4 (K.).				Serum No. 9 (Normal.				Serum of Rabbit Injected with another Rabbit's Red Cells.			
	Liver.	Kidney.	Heart.	Spleen.	Liver.	Kidney.	Heart.	Spleen.	Liver.	Kidney.	Heart.	Spleen.	Liver.	Kidney.	Heart.	Spleen.
1	10.0	0.6	1.0	1.0	0.8	—	0.6	0.6	—	—	—	—	(not done)	(not done)	(not done)	(not done)
2	10.0	0.6	1.0	1.0	1.0	—	0.8	0.8	—	—	—	—	,,	,,	,,	,,
3	10.0	0.8	2.0	2.0	2.0	—	1.0	1.0	—	—	—	—	,,	,,	,,	,,
4	10.0	0.8	2.0	2.0	2.0	—	1.0	2.4	—	—	—	—	,,	,,	,,	,,
5	10.0	0.8	2.0	2.0	2.2	—	2.0	2.8	—	—	—	—	,,	,,	,,	,,
6	10.0	1.0	4.0	4.0	2.4	—	2.4	3.0	—	—	—	—	,,	,,	,,	,,
7	10.0	1.0	6.0	6.0	2.6	0.2	4.2	4.0	—	—	—	—	,,	,,	,,	,,
8	10.0	1.0	8.0	8.0	2.8	0.4	4.6	4.2	0.2 (?)	—	—	—	,,	,,	,,	,,
9	10.0	2.0	10.0	8.0	4.0	0.8	6.0	4.4	0.4	—	0.2 (?)	—	0.8	,,	,,	,,
10	10.0	2.2	10.0	10.0	6.0	2.6	6.0	4.6	0.6	—	0.2	0.2 (?)	0.8	,,	,,	,,
11	10.0	(not done)	(not done)	(not done)	8.0	(not done)	(not done)	(not done)	0.8	(not done)	(not done)	(not done)	1.0	,,	,,	,,
12	—	,,	,,	,,	—	,,	,,	,,	—	,,	,,	,,	(not done)	,,	,,	,,
13	—	,,	,,	,,	—	,,	,,	,,	—	,,	,,	,,	,,	,,	,,	,,
14	6.0	,,	,,	,,	6.0	,,	,,	,,	0.5	,,	,,	,,	0.4	,,	,,	,,

Experiment E.

No. of Tube	Serum No. 3 (L.).					Serum No. 4 (K.).					Serum No. 7 (Animal Injected with its own Red Cells).				
	G.P. Liver.	G.P. Kidney.	G.P. Heart.	G.P. Spleen.	Rabbit Liver.	G.P. Liver.	G.P. Kidney.	G.P. Heart.	G.P. Spleen.	Rabbit Liver.	G.P. Liver.	G.P. Kidney.	G.P. Heart.	G.P. Spleen.	Rabbit Liver.
1	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)
2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
3	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
4	8.2	6.0	6.0	6.0	6.4	8.2	6.0	6.0	6.4	6.1	1.0	0.6	0.4	0.4	0.4
5	8.2	6.2	6.2	6.4	6.6	8.2	6.1	6.1	6.4	6.2	2.0	(?)	0.8	0.8	0.6
6	8.2	6.4	6.2	6.6	6.6	8.2	6.2	6.2	6.6	6.4	2.6	(?)	1.0	1.0	0.8
7	8.2	6.6	6.4	6.6	6.8	8.2	6.4	6.4	6.6	6.6	2.6	(?)	1.2	2.2	2.6
8	8.2	6.8	6.6	6.8	6.8	8.2	6.6	6.6	6.8	6.6	4.0	4.4	1.4	2.4	2.8
9	8.2	6.8	6.8	8.0	8.0	8.2	6.8	6.8	8.0	6.8	6.0	4.8	1.6	2.6	2.8
10	8.2	8.0	8.0	8.2	8.4	8.2	8.0	8.0	8.2	8.0	6.4	(?)	1.6	2.6	2.8
11	10.0	10.0	10.0	10.0	10.0	8.2	8.8	8.8	8.8	8.8	6.4	6.4	6.4	6.4	6.4
12	6.0	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)	(not done)
13	—	"	"	"	"	"	"	"	"	"	"	"	"	"	"
14	6.2	"	"	"	"	6.6	"	"	"	"	6.0	"	"	"	"

the question arises that possibly by injecting emulsions of rabbit's organs a certain amount of rabbit's red corpuscles had also been injected owing to the difficulty of completely washing out the organs.

The results noted in Experiment C are confirmed. It is also shown that, despite the large amount of rabbit's red cells injected into another rabbit, far greater than that entrapped in the organs injected, there is only a doubtful increase of the haemolytic power of this serum (Tubes 9, 10, 11) over that of a normal serum.

Experiment E.

The serums of the same animals from which the serums in the last experiment were removed were again tested, this time two days after a fourth injection of rabbit's organs was carried out. These serums were used in the strength of 1 in 4. The strength of the emulsions of guinea-pig's organs was again 1 in 150; observations are included in which an emulsion of rabbits' liver of the same strength was used. The strength of the guinea-pig serum used was 1 in 10. The control serum was that obtained from a rabbit which had been injected with its own red cells.

Again, as Tubes 11 show, it is evident that the animals injected with rabbit's organs have a greater haemolytic power than the control serum—the serum of a rabbit injected with its own red cells. As Tube 12 shows, the guinea-pig's serum possessed a high degree of haemolytic power; it was a mixture of the serum obtained from two animals. This is, however, not offered as an explanation of the result; more probably one or other animal was naturally endowed with a high haemolytic power, and thus is explained the comparatively high degree of haemolysis observed in *all* tubes which contained the guinea-pig's serum. This experiment also shows that rabbit's liver is even a more powerful means of checking haemolysis than the liver of the guinea-pig.

Finally, the question must be raised whether or not the change produced in the experimental serums was due merely to the presence in such serums of unaltered organ substance, and that the cells of the body of the animal into which the injection had been made took no part in the production of an increased haemolytic power of the experimental serums; in other words, that the experimental animals merely acted as test tubes. This question is readily answered, because any change effected in the serum of a normal animal by the addition to it of organ emulsion is that the serum no longer haemolyzes *as much* as when no emulsion is present, given that sufficient amount of complement is available (see Tubes 1 to 10 compared with Tube 11 in all the experiments).

The inference is, therefore, a correct one that animals injected with the organs of other animals of the same species react with the production of increased haemolytic power, and probably this is due to the development of an increase of amboceptors, which is no novelty, for Ehrlich and Morgenroth[1] were able to show that goats injected with the laked red cells of another goat developed amboceptors which were capable of haemolyzing the red cells of a different goat.

It is worthy of note to call attention to the fact that none of the rabbits which had undergone injection with the emulsions of other rabbits' organs appeared to suffer any departure from health, even though the injections were numerous and carried out through several months. They took food well throughout, and gained weight. One exception to this rule was the case of an animal which succumbed to an injection which was carried out faultily, the emulsion reaching the cellular tissues instead of the peritoneum; diffuse cellulitis occurred, and the animal was destroyed, a staphylococcus being recovered from the pus. It must be stated that in certain cases, immediately after the injection, the animals showed tachypnoea, and were even profoundly collapsed, though never for more than half an hour. Such effects were possibly due to anaphylaxis, or, in the case of injection with kidney substance, to its known pressor effects.

General Conclusions.

1. It appears possible, as a result of the experiments above described, to develop in the serums of animals into which injections have been made of the organs of another animal of the *same* species, a change which consists in part at least in the increase of the haemolytic power of the serum, an observation which so far as we are aware has not hitherto been made.* Other changes which may occur as a result of the experimental introduction of organic extracts are being studied by us by the method of "absorption" introduced by Ehrlich and Morgenroth.

2. Further, as shown by the above experiments, the emulsions of different organs appear to have different powers of checking the haemolytic property of such experimental serums, the kidney possessing the greatest and the liver the least power, whilst the spleen and heart occupy an intermediate position, and are equally or nearly equally potent; it would appear from Experiment "E" that the organs so effective are not limited to those of the guinea-pig. The nature of this body or bodies is also being investigated by us.

3. The form of the above experiments may prove of use in determining the strength of the haemolytic power of an experimental serum. Instead of estimating the titre by reference to red corpuscles, this may be done by estimating the titre in terms of extracts of organ.

REFERENCE.
[1] *Berl. klin. Woch.*, 1901, No. 21, S. 569.

* These experimental results should not be confused with those of Ehrlich (q.v.), who proved that haemolytic amboceptors can be developed in the serums of animals which had been injected with the *red corpuscles* of other animals of the *same* species.

SEVEN CASES OF APPENDICOSTOMY FOR VARIOUS FORMS OF COLITIS.

By FREDERICK C. WALLIS, F.R.C.S.,
SURGEON TO CHARING CROSS HOSPITAL.

As the surgery of colitis is still in its infancy, it may be of some practical use to supplement my paper published in this JOURNAL of January 2nd, 1909, on the surgery of colitis, with the following 7 cases of appendicostomy, which are typical of the class of case in which the operation is of most benefit. Two were cases of haemorrhagic colitis, three of ulcerative colitis, and two of membranous colitis.

Perhaps the most marked result was in the first case of haemorrhagic colitis; the second case ended fatally after some weeks, and I do not think that the operation in any way alleviated the symptom. The reason for this was that the patient had marked ulceration of the small bowel as well as of the large. A fact that will generally be borne out by *post-mortem* examination is that the continuance of fluid motions largely composed of blood after the operation of appendicostomy, and after the large bowel has been irrigated, always means that there is some ulceration of the small bowel as well. These patients become increasingly emaciated, and their food passes in an undigested state.

In the first case, on the other hand, in which the pathological condition was limited to the large bowel, the relief was extraordinary, and there is no doubt that the boy's life was saved by the operation.

All three cases of ulcerative colitis were greatly benefited. The first case got well right away. The second was entirely cured in a few weeks; and the third, which was one of some years' standing, eventually got practically well, but has to be careful as to her method of life, otherwise there is some return of the former trouble.

Of the two cases in which the operation was done for muco-membranous colitis one is, according to her own statement, and according also to other observers, much relieved by the operation, and the other case has certainly received the greatest relief, and will, I have no doubt, get quite well with ordinary and reasonable care. The last account I had concerning this lady was that she was in Italy and able to go about as well as any one, but had to be careful not to "overdo" it.

ULCERATIVE COLITIS.

CASE I.

R. D., aged 38, a gas stoker, was admitted to Charing Cross Hospital with a history of passing blood and mucus and of the bowels acting three or four times a day. He complained of flatulence and abdominal pain. He was put to bed and dieted; he was given an intestinal antiseptic and milk fermented with lacto-bacilline. With this treatment he improved so much that he was discharged, but was readmitted four months later with a return of the old symptoms.

Operation.—On April 4th, 1908, the sigmoidoscope was passed up the bowel for 24 cm., and the result of this examination being somewhat negative, it was obvious that whatever ulceration there was was beyond this limit (a somewhat unusual occurrence in ulcerative colitis). Appendicostomy was then performed in the usual way and the colon was irrigated with saline solution both at the time of the operation and daily afterwards, several pints being washed through at each lavage. The man made a rapid recovery, and has remained well ever since. The appendicostomy was allowed to close.

CASE II.

T., aged 45, was brought to me by Dr. Gregory of Redcliffe Gardens in July, 1908. The history was that she had been passing blood and mucus since Christmas. There was slight abdominal pain. She was losing flesh and had become anaemic. On examining the mouth, there was a marked condition of pyorrhoea alveolaris.

A sigmoidoscopic examination was made under an anaesthetic on July 2nd, 1908, and it was found that the upper rectum and the sigmoid as far as the sigmoidoscope would go were ulcerated in patches and generally congested. The *Streptococcus longus* was cultivated from a swabbing taken from the discharge in the sigmoidoscope. This strongly suggested that the pyorrhoea alveolaris was the cause of the colitis. The condition of the gums was immediately treated, and the patient was dieted and put on lacto-bacilline.

Operation.—Appendicostomy was performed on July 10th. The colon was washed through with several pints of sodium bicarbonate, ʒj to Oj, on the operation table, and for the succeeding seven days 4 pints of this solution were washed through twice a day; during the next seven days this was only done once a day. For the last five days there was no blood or mucus in the wash-out.

The patient went into the country shortly afterwards, and the appendicostomy opening was allowed to close up. She has remained perfectly well ever since.

CASE III.

L., aged 30, was sent to me by Dr. St. John Randall, of Aliwal North, Cape Colony. There was a history of ulcerative colitis extending over some years, for which all the usual well-known forms of expectant treatment had been tried, and copious enemata had been given by the rectum. This patient was put into a nursing home, and a sigmoidoscopic examination confirmed the diagnosis of ulcerative colitis. A swabbing taken from the pus in the sigmoid grew a large number of streptococci. For two months this patient was kept in bed and dieted and treated with lacto-bacilline and lavage of the colon.

Operation.—As there was no obvious improvement, appendicostomy was performed on April 24th, 1908. The appendix was found to be kinked and bound down, and before it could be brought up to the skin wound it was necessary to divide the whole of the meso-appendix. The colon was washed out on the operation table with 5 to 6 pints of warm water and sodium bicarbonate of the strength of a drachm to the pint. This lavage was continued for some weeks, and then was gradually diminished as the patient's symptoms became less and less. Sigmoidoscopic examinations were made from time to time; in November, 1908, there was some persistent ulceration in the upper part of the rectum, but cataphoresis once or twice produced a marked improvement.

In December the appendicostomy wound was allowed to close, and the patient gradually led the life and took the food that any one else in health would take; she remained perfectly well for some months until she caught a chill, when there was some slight return of the symptoms, which, however, soon disappeared with proper care.

Having regard to the number of years that this ulcerative condition had been in existence, the result is, on the whole, very satisfactory, and although one hardly expects that the mucous membrane will ever become quite normal again, still, with ordinary mild precautions, this patient can live with enjoyment and without any of her former distressing symptoms.

HAEMORRHAGIC COLITIS.

CASE IV.

G. B., a youth, aged 18, was admitted into Charing Cross Hospital on April 1st, 1908, suffering from severe haemorrhagic colitis.

The history was that he had begun to pass blood about fourteen days before he was admitted into hospital, and that his bowels were opened some five or six times a day, the amount of blood passed at each time varying from a few drachms to about 5 oz. Previous to this attack he had been constipated for several months.

When seen by me a few days after he had been in hospital it was evident that he was extremely ill. He was quite blanched, and both lips and conjunctivae were bloodless; his pulse was weak and "slapping." The abdomen was somewhat tender to handle, but it was not distended. When examined by the sigmoidoscope the rectum was first washed out with saline solution, and after the instrument had been passed any haemorrhage was kept in check by passing in cotton-wool soaked with hazeline solution. By this means a good view was obtained of the bowel for 24 cm. The upper part of the rectum and the sigmoid were seen to be ulcerated, and the whole of the mucous membrane was highly congested.

On April 3rd the abdomen was opened in the mid-line and the colon was found to be thickened from the sigmoid to the caecum and there were many enlarged glands in the meso-colon. Appendicostomy was then performed and the mid-line wound sewn up. The appendix was amputated and a catheter passed into the caecum and the large bowel washed through with 5 to 6 pints of saline and finally washed through with some hazeline solution (a drachm to the pint).

This patient made a most rapid and complete recovery, and it was quite interesting to see how quickly he regained colour and strength and how effective the daily washing through was in stopping the haemorrhage. On two occasions he vomited, but this, I was informed, was because he persisted in eating too much when he had the chance. This chance, however, was taken away from him and there was no further trouble.

The opening was allowed to close after a few weeks, and the boy went to a convalescent home. He has been well ever since.

CASE V.

E. F., a young married man, aged 28, seen at Horley with Dr. Williamson. The history was that for some months he had had frequent actions of the bowels always associated with the passage of blood. The bowels would sometimes act twelve and fourteen times in the twenty-four hours. The abdomen was somewhat tender and rather retracted. The temperature was persistently high, 100° to 101°. The man was emaciated, and a large amount of the food he took passed undigested.

Operation.—Appendicostomy was performed on January 26th and the same treatment adopted as in the last case. The patient was temporarily improved; for a time the bowels did not act so often, and the blood passed was less; but there was not any real improvement and the man gradually became weaker and died six weeks after the operation.

There was no *post-mortem* examination, but having regard to his symptoms and comparing his general condition with others

of a similar nature in which I have been able to get a necropsy, I have no doubt that there was in this case considerable ulceration of the small intestine as well, and that it was this condition which killed him.

Muco-Membranous Colitis.

Case VI.

E. C., aged about 30, was seen by me in consultation with Dr. Sydney Beauchamp in June, 1908. The patient was a single lady and had been the subject of chronic membranous colitis for many years. Everything and all things had been tried, but there was no response or only very little and fleeting. The amount of membranous mucus passed was enormous. There was a certain amount of abdominal pain, occasional rises of temperature, and needless to say the patient was completely obsessed by her complaint and thought of little else.

Operation.—Appendicostomy was performed on June 23rd, 1908, and the same routine was carried out as in the other cases, with the result that in a very short time nearly the whole of the membrane disappeared and the patient began to look and feel much better.

Unfortunately she was allowed to go away to a convalescent home, where they seemed to have done everything they ought not to have done, both with regard to diet and exercise, with the result that she relapsed, and when she went home was not much better than when she went away from it. A letter written to me seven months after the operation, after giving details of various things volunteers this statement: "There is no doubt I am distinctly better, the *worst* days now are better than the best days used to be, before the operation. I am in much better health . . ."

This can only be looked on as a qualified success, and I cannot help thinking that if Dr. Beauchamp and I had been allowed to have a free hand in the after-treatment a much better result would have been obtained.

Case VII.

Mrs. A., aged about 35, was seen by me in consultation with Dr. Harry Huxley on April 22nd. The patient had for years been the subject of membranous colitis which was associated with abdominal pain and constipation. She had a bad colour and was unhealthy-looking. The amount of membrane passed was considerable. A sigmoidoscopic examination did not reveal any ulceration of the rectum or sigmoid.

Operation.—Appendicostomy was performed on May 6th, when the appendix was found to be about 5 in. long, and generally hypertrophied. The lumen was filled with muco-pus, and it was thought highly probable that this condition was the cause of the colitis. The same routine was carried out here as in the other cases, and a speedy relief of the symptoms was arrived at.

The patient left for Italy a few weeks later, and has sent excellent reports of her progress since, but it is too early to say whether this is a permanent cure or not.

FULMINATING APPENDICITIS.

By H. BRANSON BUTLER, F.R.C.S.Edin.,

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Many surgeons have urged the necessity of early diagnosis and early operation in appendicitis, and there are now few people who disagree with their opinion. Nevertheless, it is common to hear hospital surgeons grumble about appendix cases, which have been too long treated outside, and come to hospital with the appendix already in a gangrenous condition and with general or generalizing peritonitis.

If, then, all are agreed as to the advisability of early operation, the difficulty must lie in the way of early diagnosis. Unfortunately the very cases in which the appendix becomes gangrenous in the course of a few hours are those in which the difficulty in diagnosis is greatest. The purely consulting surgeon rarely sees these cases during the first twenty-four hours of illness, and therefore rarely has the opportunity of seeing the actual condition of the parts within the first six or seven hours from the onset. I therefore make bold, in my dual capacity of hospital surgeon and general practitioner, having seen from the start and operated upon a certain number of this particular type of case, to state what I believe to be the explanation of the condition and the way in which it may be recognized in good time.

In the class of case to which I allude, pain is always present from the start, and for that reason the medical attendant is nearly always summoned early, though there is no time to waste, and he has to make up his mind at once. What, then, are the data on which he has to work, if he is to make up his mind to operate or call in a surgeon to do so? As a rule the patient has been in his usual health until he was attacked with a sudden pain—or more frequently with a vague uneasiness—in his abdomen. In the latter case he will probably have continued with his ordinary avocations for an hour or two; then, finding that the pain increases, he will stop and, not unusually, take a dose of aperient medicine on his own account. An hour or two later, when the aperient is beginning to disturb his intestines, he will either vomit or the pain will greatly increase, or both; and at this stage the doctor is generally called in.

On arrival the doctor finds his patient apparently not very seriously ill, but complaining of general pain all over the abdomen, which he says makes him feel weak. If asked to point out any particular spot where the pain is worst, he will generally point to the epigastrium or umbilicus. His temperature is normal, and his pulse is normal in time and quality. The abdomen is quite soft, and moves with respiration fairly well. It is this combination of negative conditions which leads to fatal delay; the conclusion often come to is that the case is one of colic exaggerated by an aperient which has failed to act, and sometimes the mistake of giving another dose of aperient medicine is made. On examining the abdomen it will be found that there is tenderness in the right iliac fossa on deep palpation, and tenderness in this part is sometimes felt when the abdominal contents are displaced by pressure in the left iliac fossa. But while admitting this localized pain, the patient will often make light of it, while insisting on the general pain, and so make the diagnosis more difficult. If the skin is gently pinched up with the finger and thumb, the patient will own to increased cutaneous sensitiveness on the right side over the appendix area, and sometimes says that there is an answering pain inside the abdomen, though no pressure has been used. With the finger in the rectum no lump is felt at this early stage—only a general tenderness, which may be slightly more marked on the right side.

Normally it requires four to four and a half hours for food to reach the ileo-caecal valve, so that on auscultation over the caecum, the caecal sounds are normally absent from about seven hours after the last meal of the day until four hours after breakfast (Hertz). At all other times during the twenty-four hours, and at all times when the patient has been taking fluid nourishment at frequent intervals (as he generally has been, when his rest has been disturbed by pain) the absence of these caecal sounds is significant, and points to the probability that the ileo-caecal sphincter is held in a state of tonic contraction owing to powerful irritation in its immediate neighbourhood.

A large soap and water enema should now be given, and the patient should be instructed to notice particularly if he passes any flatus with the return of the enema. If the rectum contains faeces they will be passed with the enema, but there will be very little or no flatus passed and none with a second enema. This is an important sign, and with the other points mentioned, even though they may not be as strongly marked as one would expect in such a serious condition, must be considered sufficient ground for opening the abdomen without delay, for there will be no other signs until the case has entered upon a very much more dangerous stage.

On opening the abdomen the appendix is found very swollen, greatly congested and plum-coloured, quite free from adhesions, except at its junction with the caecum, where it is constricted. It lies transversely under the caecum, in such a manner that the meso-appendix is twisted on itself, and has to be manipulated with great care to avoid rupture while the caecum is being brought into the wound to allow of removal of the appendix.

These fulminating cases I believe are due to the formation of a volvulus of the appendix, which is thereby strangulated, and the toxaemia and localized peritonitis, which mark ordinary cases of appendicitis, are not present. Gangrene supervenes very rapidly, and there is no time for adhesions to form to shut off an abscess. General septic peritonitis therefore ensues if an operation is not performed in the first few hours after the onset of the pain. I believe that a volvulus of the appendix may develop in any case in which the appendix lies free in the abdomen, but not when it lies in the retro-caecal fossa. In two of my cases the patients had been indulging in violent exercises, to which they were unaccustomed, and this may have been the exciting cause of the volvulus.

Once the appendix has gained the position described, the veins in the meso-appendix are kinked, but it is probable that the artery with its firmer walls is not. This quickly produces a condition of congestion in the appendix, which the small veins passing directly from the appendix to the caecum, although they are not obstructed, are inadequate to relieve. When this condition once occurs all chance of spontaneous recovery is passed. What appears at the operation to be a tight constriction at the base of the appendix is really only the line of demarcation between the strangulated appendix and the caecum.

These notes are founded on four cases in which the signs and symptoms were identical. They occurred in a total series of fifty-two appendicectomies performed during a period of rather more than three years. The first two cases were operated upon after signs of peritonitis had supervened, in both cases just under forty-eight hours from the first symptom. Both these cases died. They had absolutely general peritonitis by the time operation was performed, and in the first case the appendix was found broken off from its attachment to the caecum. The last two cases were operated upon as soon as the necessary arrangements could be made after first seeing the patients—about six hours after the first symptom. In these the operations were simple enough, and the patients made uninterrupted recoveries, but in each case the appendix was obviously in a condition only just short of gangrene. The majority of my cases have, of course, been in hospital practice; in the four under consideration, however, three were private patients of the better class.

Volvulus is not the only cause of gangrene of the appendix, of course, but I believe it is the cause of gangrene in all cases when it happens in so short a time in the subject of a first attack.

PNEUMOCOCCUS INVASION OF THE THROAT,

FOLLOWED BY PLEUROPNEUMONIA AND APPENDICITIS: OPERATION AND RECOVERY.

By WM. ERNEST PEACOCK, M.D.,

With a Note by

Professor OSLER, M.D., F.R.S.

On August 4th, 1908, I was called to see a boy, aged 11, with a sore throat and temperature of 101° F. The pharynx was swollen and congested, and the tonsils were enlarged, here and there displaying dirty follicular concretions. The patient looked ill, and I found he had recently complained of slight pains and stiffness in the limbs. Whilst staying with relatives a few days previously, he became feverish and saw a doctor, who found his temperature one evening to be 102° F.

There was slight irregularity of the heart's action and a faint bruit was heard at the apex. A salicylate mixture was given and rest ordered. In a short time the patient was well. At his school some boys had suffered from indefinite feverish attacks, which were thought at the time to be mild cases of influenza. There was no albumen in the urine. On August 10th a brother of this patient was suddenly taken ill with a sore throat, and the sequence of events in his case was so interesting that I report them at some length:

The temperature was 102° F. The tonsils were enlarged and the whole pharynx was congested. The glands of the neck were markedly enlarged on both sides, especially at the angles of the jaws. Suspecting an exanthem, a swab was taken from the throat and sent for examination to a pathological laboratory: a large number of pneumococci was found. There was no albumen in the urine. The patient was kept in bed and a salicylate mixture given with an antiseptic gargle. He improved for a week. On August 17th he became worse and vomited three times. His temperature registered 101.5°, and next day reached 103° F. Pain was complained of in the lower part of the right chest, both back and front, but especially over the last three right intercostal cartilages. These pains radiated to the abdominal wall as far the pubes. On auscultation there were a few crepitations, and marked pleuritic friction was heard behind and in front of the right lung, corresponding to the painful area. No friction was heard over the abdominal cavity. On palpation of the abdomen he did not complain of tenderness, there was no swelling, dullness on percussion, or distension. Nothing abnormal could be felt per rectum. There were, however, shooting pains felt over the pubes with frequency of micturition and pain on passing water. Special attention was given to the region of the appendix, but nothing abnormal was observed. The patient became worse and was acutely ill. Professor Osler, of Oxford, was called in consultation and confirmed the presence of pleurisy with crepitations at the base of the right lung. This condition was thought to explain the radiating pains extending to the pubes.

Afterwards the abdominal pain became more marked, and tenderness was noted in the right flank, with a sense of resistance and slight dullness on percussion. The patient became worse, and the question of operation arose. Dr. Osler again saw the boy, and confirmed the diagnosis of appendicular abscess. He advised postponement of the operation for a day or two, as the patient was not in a fit condition for surgical treatment. On August 30th there was marked extension of the dullness, which now reached mid-line, and extended to the left flank. A fluctuating swelling was felt per rectum in Douglas's pouch. Mr. Parker of Oxford opened the abdominal cavity in the right flank, and made a counter incision in the left flank. A large quantity of foul-smelling pus escaped from both wounds. Large drainage tubes were inserted, the ends meeting well down in Douglas's pouch. The temperature fell, and the patient went on favourably, gaining weight and strength. He was kept out all day in the open air.

On September 17th he became worse, though drainage had been kept up all the time, the tubes being changed and shortened from time to time, and free irrigation carried out by passing lotion from one side to the other twice daily. It became apparent from the condition of the patient that pus was collecting somewhere. On one or two occasions a well-marked scarlatiniform rash appeared all over the body. Mr. Parker carefully examined the patient under an anaesthetic. The old wounds were opened up, and the affected regions explored by the fingers in all directions. No pus was discovered. The examination was repeated on another occasion without result. Large tubes were again inserted, meeting as before in Douglas's pouch.

His condition improved for a while, but he again became acutely ill. Mr. Parker examined the boy once more under an anaesthetic. Per rectum there was suspicion of a fluctuating tumour high up in Douglas's pouch. An operation was arranged for the following day, but during the night a large abscess burst into the bowel. The patient made an uninterrupted recovery. He was confined to his bed for about twenty weeks in all.

The sequence of events is a point of interest in the case, the usual order of infection from below upwards being reversed. During the drainage a "pip"-like concretion passed through the tube into the dressings, and a slough which also passed was thought by pathologists to be part of the vermiform appendix. The patient never had a cough, so that a specimen of sputum could not be obtained for examination. The temperature only once reached 104.5° F., and was lower generally than one might have expected in such a desperate illness, marked by the presence of such large quantities of foul faecal pus. The pulse, on the other hand, was very feeble and quick, rarely below 130 at night. On one occasion fatal collapse threatened, but passed off after a hypodermic injection of strychnine.

I believe the open-air treatment was a very important factor in the treatment of the case. The patient often presented a very curious appearance, one side of his face being quite pale, whilst the other half was scarlet. Occasionally a similar effect was noticed on the trunk.

Note by Dr. Osler.

This case illustrates in an interesting way the relations of appendicitis and pleuropneumonia. At my first visit I regarded the abdominal pain as due to the involvement of the diaphragmatic pleura. This is by no means uncommon, and I have seen a number of cases of pneumonia in which the diagnosis of appendicitis was made. So completely may the abdominal symptoms overshadow the case that laparotomy has been performed.

Then, in a second group, the appendix is involved simultaneously with pleura and lung. It may be hard to say which part is first affected; as a rule the abdominal features predominate.

Thirdly, during the convalescence from pleuropneumonia a patient may have an attack of appendicitis. In one instance of this sort the return of the fever and of the pain were thought to be due to pleurisy, but on the third day there was a well-marked tumour in the right iliac fossa, and an appendicular abscess was opened.

I had an acute regret in this case—the common regret of the physician—that the surgeon was not called in earlier.

WHITEHEAD'S OPERATION FOR HAEMORRHOIDS.

By E. STANMORE BISHOP, F.R.C.S.Eng.,

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After twenty years' experience of various operations for the cure of haemorrhoids, I have no hesitation in recommending Whitehead's operation as at once the most effective, the least painful, and the safest method, but it is necessary for success that certain precautions should be taken beforehand, and that the technique should be very carefully carried out.

The condition being one which is fairly frequent, abundant opportunities have occurred during the time mentioned both for the trial of the many other methods recommended in surgical works and journals, and for an estimation of final results.

In the early days of my surgical practice I used the clamp and cautery method, later the method of ligature, occasionally other plans, such as injection with carbolic acid, ignipuncture, etc., but for many years now these have all been abandoned in favour of the method introduced by Mr. Whitehead, which has given me by far the most satisfactory results.

The division of haemorrhoids into external, internal, and mixed has nothing to justify it from a surgical point of view; the only division of any practical importance being that between arterial and venous piles. These two have well-marked and radical differences, but from the surgical standpoint even these are not necessarily such as to require different treatment, at least if Whitehead's operation is adopted, as both are amenable to it.

The essential idea of the operation is based upon the anatomical facts that all venous piles are the dilated loops formed in the submucous tissue by the inferior haemorrhoidal veins around the anus and lower end of the rectum; that these pass through the firm fascial sheath around the rectum just above the sphincter, lying below immediately beneath the mucous membrane; that they have no valves, and therefore that if any obstacle exists which can hinder the ready return of the blood through them, they, lying as they do amongst loose connective tissue which yields but a poor support, will dilate and become more or less tortuous and sacculated. Once dilated, the firm fascia above through which they pass will still more tend to prevent their being freely emptied. The flow in them becomes more and more sluggish; clots tend to form within them. Should any firm hard mass pass over them, as during the defaecation of constipated and retained faeces, they may easily become injured. Their weakened and damaged walls will then permit of the passage of micro-organisms from the rectum and skin, and consequent inflammatory changes; but apart from these latter, the constantly enlarging loops will project against the thin skin immediately around the anus, which becomes stretched over them. It is worthy of note that the affected loops lie immediately beneath the mucous membrane, and are more adherent to it than to the parts outside.

In any given case, these loops are in all stages of development; three or four will be fully developed, large, unmistakable bulging masses, bluish in colour, owing to the venous blood or clots which they contain; probably easily separable from one another, and capable of being separately dealt with, but around and between these will be a number of smaller loops in which dilatation has only begun or has not progressed far, but which are capable later of equal enlargement. Any operation, therefore, which merely deals with the fully-developed masses is almost certain to be followed during succeeding years by a return of the disability, since it leaves behind these smaller veins, and puts no obstacle in the way of their future distension; indeed it increases that possibility since the weight of the blood is transferred to them.

The operation by clamp and cautery as well as that by ligature can only deal with the larger loops; it is impossible by either of these methods to affect all the veins. Any attempt at this with the cautery would infallibly be followed by so much contraction of the anal orifice as to lead to very unpleasant final results, whilst it would be almost impossible to find—much less to tie—all the venules which could at a later time replace those which are then amenable to ligature. The effect upon any patient is extremely depressing when he discovers, after submitting to what he believes to be a radical operation, that in a few years things are as bad as before. He is apt to conclude that the disease is incurable.

The amount of pain caused—not at the operation, for during that he is anaesthetized, but afterwards, during the process of healing—is far greater with the alternative operations than with the properly performed Whitehead. Indeed, I have often been surprised at the small amount of discomfort experienced by the patients who have undergone the latter operation; their period of convalescence and the time during which they need to be confined to bed are also very much less.

Before determining upon any operation it is imperative that the surgeon should be certain that no concealed disease, such as cancer of the rectum or a tuberculous stricture, exists, of which the piles may be the only external evidence. A careful preliminary examination should therefore in all cases be made with the finger, and, if necessary, with the proctoscope, before any decision is arrived at. This, of course, applies to all operations about the anus.

Having decided that an operation is necessary and that Whitehead's shall be done, there are several comparatively small details which must receive due attention if a successful result is to be attained.

The intestinal tract should be previously cleared as much as possible. It is not only annoying, it is distinctly detrimental to the work, if large masses should make their appearance in the rectum during the ensuing week. Probably the best method of ensuring their absence is the administration on the day but one before of an ounce of castor oil, the taste of which may be disguised by an admixture with it of 2 drachms of tincture of cardamoms. On the day before operation the action of this should be supplemented by a copious enema of soap and water, so that the rectum may be clean. At the operation itself another free douche of weak permanganate of potash solution should also be used during the process of dilatation.

Free dilatation of the sphincter should be done before any cutting is commenced. It should be gradual, plenty of time being taken over it, so that no tearing of the muscle is possible. The best instrument for this purpose is, I think, my modification of Allingham's dilator. In this instrument the original rounded, short handles are replaced by two 4 in. long flat levers, approximation of which by the hand opens the dilating blades. By manual compression of these levers unduly rapid expansion of the sphincter, and possible damage therefrom, is prevented, since the—ordinary—hand is incapable of overcoming the sphincteric resistance too suddenly. A ratchet and screw connecting the two blades permits of maintaining the amount of dilatation so gained whilst the hand is resting. Dilatation should never be done by the screw itself, as it is impossible then to gauge the amount of force employed, and the sphincteric muscle may thereby be unduly stretched or even torn, a result most carefully to be avoided. But complete and effective dilatation before any further manipulation is extremely important to success; by this manœuvre, whilst the sphincter remains intact, it is rendered sufficiently paretic to ensure complete rest to the part during the first few hours, gas is allowed free exit, and spasm prevented.

During the operation any actively spurting vessel should be tied, but venous bleeding may be ignored; this bleeding is sometimes free, but will cease as soon as the operation is completed.

When finished, the edges of the anus frequently appear very irregular, tags of lately distended and stretched skin projecting from the orifice; it is wise to ignore these. This skin, having been stretched over dilated veins which are now removed, will, if left alone, gradually contract again. Were these projections removed, although a neater immediate result would be obtained, the final condition due to their retraction would be an orifice which was unduly dragged to one or other side, or so tight as to render the act of defaecation a painful process.

After the suturing is finished, a suppository containing $\frac{1}{4}$ grain of morphine may be inserted in the rectum with advantage. This tides over the first few hours during

which some pain and smarting may be felt, and does not appreciably affect the action of the intestine later. For the bowels must not be "locked up." At first it was thought that, by preventing the passage of a stool for some days, rest and freedom from infection of the line of union would be obtained, so facilitating the process of healing, but it was soon found that any advantage so gained was at the expense of the future, when hard masses which had accumulated in the upper rectum and sigmoid during this period began to descend and to be forced through the half-healed ring, tearing and splitting the tissues, and thus producing not only pain, but being followed by an inflamed condition of the connective tissue around. It was far more conducive to a smooth recovery if the stools were from the first rendered soft, and easily and frequently expelled by the use of such laxatives as confection of senna, liquorice powder, cascara, etc.

By this operation not only the more prominently enlarged veins are removed, but any at that time "embryonic" haemorrhoids are taken away, and the prospects of a permanent cure are thereby immensely increased.

In certain cases, perhaps 1 per cent. or less, during the first six months after operation, a tendency to contraction at the line of union between skin and mucous membrane has been observed. The mucosa retracts slightly, so that this line in the course of a month or two will no longer be found at the edge of the anus, but from ½ in. to 1 in. higher up. In these cases the finger introduced into the rectum will encounter a slight contraction which gives the sensation of a thread encircling the gut at this level. This is, however, most easily dilated. If bougies of gradually increasing size are passed for a few days, the sense of constriction will rapidly disappear, and, so far as my experience goes, will not return. And this constriction is never so great or anything like so intractable as that occasionally encountered after the use of the cautery.

If an arterial pile exists below the level to be removed in this way, it will be cured by the same means, the supplying artery being drawn down and tied during the process of removal; but should it exist higher up, when the anus is fully dilated, and whilst the dilator is still *in situ*, it can be easily dealt with in full sight by the ordinary method of transfixing beneath and tying in quadrants. But arterial piles are rare, the immense majority of haemorrhoids being simply venous.

This operation has met with scant justice or appreciation amongst writers on the subject, who still in most textbooks recommend the alternative measures. It has been described as causing great loss of blood, as needlessly severe, and is said by Keen and others to be now reserved for very bad cases of prolapse with many piles; but if the principle is correct, as I have tried to show, it is applicable to all, and will be found in all to give the best ultimate results. The amount of blood lost, if the technique be carefully followed, is by no means excessive, whilst in many of such patients a little bleeding is salutary.

For fifteen years I have never practised any other method, having had the advantage of seeing Mr. Whitehead perform some of his earliest operations. I have modified the method I then saw him use, as I believe he has since done himself, by separating the entire cylinder of mucous membrane with its attached veins up to and within the sphincter before attempting any transverse cut, but the essential principle is the same, and it has always been followed by a satisfactory result. In only one case has any return been noted, and that was in an early instance in which probably sufficient care was not taken to free the cylinder completely and for the necessary height.

Some hundreds of cases have been so treated without any mortality, and in all with a speedy convalescence. In a few—possibly 2 per cent.—spasmodic urinary retention for a few hours has occurred, and, in still fewer, pain at the anus has been complained of, but both have speedily yielded to hot boric fomentations to the part. Catheterism has never been required, and, although haemorrhagic discoloration has been seen around in a few instances, suppuration or abscess has never followed. Recovery has in the great majority been singularly uneventful, and in all complete.

The following are some few of the cases which could be found and examined years after the performance of this operation. They are taken haphazard:

Male, aged 23. Operation November 6th, 1903. Three years' pain, and appearance of piles, which do not bleed. After operation, pain immediately after return to consciousness, relieved by hot compresses and morphine. Later considerable haemorrhagic discoloration around. This disappeared by the end of the third week. Examined September, 1909: anus and rectum normal.

Male, aged 42. Operation November, 1894. Five years' intermittent pain and haemorrhage. Piles at the time of operation the size of small plums. Examined September, 1909: anus and rectum normal.

Female, aged 39. Operation May, 1900. Fourteen months' intermittent haemorrhage, sometimes at, sometimes between, times of defaecation. Pain, at first intermittent, then becoming constant; always much worse if the bowels were constipated. After operation for twenty-four hours required hot fomentations for pain; this rapidly passed off, and further recovery was smooth. Examined August, 1909: anus and rectum normal.

Female, aged 40. Operation April, 1905. Followed in two months by constriction as of a thread half an inch up the rectum. Bougies passed daily for one week; constriction disappeared. Examined September, 1909: anus and rectum normal; no sign of recurrence of constriction.

Male, aged 49. Operation July, 1907. Piles for seven years. Operated upon elsewhere by injection of carbolic acid, followed by inflammation around, evidenced by the necessity for opening an abscess; this occurred in 1905. Very little improvement even at the time; size has steadily increased since then, and more quickly during the last six months. Great pain, especially during defaecation and at night. Examined September, 1909: anus and rectum normal: no pain or bleeding since operation.

Male, aged 59. Operation August, 1896. Five years' discomfort; twelve months' intermittent haemorrhage. Four months' gradually increasing pain. At the time of operation there was some prolapse of the rectum, with a protruding ring of haemorrhoids, four or five of which were specially large; the patient was much exhausted by pain and loss of blood, and had to be lifted on to the operating table. Examined September, 1909, thirteen years later: in good health, although 72 years old. No trace of piles; bowel functionating well and easily.

Many of the hospital patients, as usual, cannot be traced, but the fact that in no case has any one operated upon in this way ever returned with a relapse is, when taken in conjunction with what is known of those who could be found, at least presumptive evidence that the result has been, in them, equally satisfactory.

THE AFTER-RESULTS OF THE OPERATIVE TREATMENT OF HAEMORRHOIDS:

A STUDY OF THREE HUNDRED CASES.

By H. GRAEME ANDERSON, M.B.,
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So many conflicting statements are made about the after-results of the operative treatment of haemorrhoids, that when I took up duties as House-Surgeon in St. Mark's Hospital I thought it might be interesting to keep a record of the after-results of all the cases of haemorrhoids treated by operation

Three Hundred Cases of Haemorrhoids Treated by Operation at St. Mark's Hospital during Eighteen Months.

150 by means of the ligature, or Salmon's operation.
100 by excision of the "pile-bearing area," or Whitehead's operation.
50 by the clamp and cautery.

Pain.

This is an extremely difficult symptom to classify, as the personal element has so much to be taken into account. The amount of pain experienced has been classified under three headings:

(*a*) Severe pain, which necessitated the giving of more than ¼ grain of morphine.
(*b*) Moderate pain, which necessitated ¼ grain of morphine.
(*c*) Little or no pain, which did not necessitate the use of morphine.

	Severe.	Moderate.	Little.
	Per Cent.	Per Cent.	Per Cent.
Clamp and cautery	0	30	70
Ligature	10	57	33
Whitehead	16	56	28

The pain was borne better by the female patients than by the males, and Jewish patients complained much more than others. The pain lasted from twelve to twenty hours after the operation, and then there was comparative comfort till the fourth day, when the bowels were moved.

Factors influencing the amount of pain were:

(*a*) The extent to which the sphincters were stretched seemed to bear little relation to the amount of pain experienced.

(*b*) Position of the patient after operation had little effect in minimizing pain, although most were more comfortable lying on the right side.

(*c*) In the clamp and cautery operation pain was more severe if anal skin was included in the clamp and cauterized, or in the ligature operation when some fibres of the sphincter were included in the ligature, or when the submucous tissues were unduly adherent to the sphincters.

The pain is best controlled by means of ¼ grain of morphine given hypodermically an hour after the operation. On the fourth day, when the bowels are moved, a little pain may be complained of, usually more severe at the second call to stool, but this pain can be obviated by the injection of 4 to 6 oz. of sterilized olive oil into the rectum at the same time as the purgative (1 oz. of castor oil) is given. This softens the motion, lubricates the passage, and ensures easy defaecation. This is well illustrated by the case of a private patient who was operated on by the Whitehead method after having been previously operated on by the ligature method some years before in another London hospital. He was a well-educated man, and stood the pain well, but when the fourth day was approaching he begged to be given something to relieve the anticipated pain of defaecation, which had been very severe after his previous operation. Olive oil was injected into the rectum, and he did not suffer in the least. This little precaution had not been carried out after his former operation.

Use of the Catheter after Operation.

Of the cases under consideration, the catheter was used as follows:

Ligature	10 per cent. required the catheter.
Whitehead	6 per cent. required the catheter.
Clamp and cautery...	0 per cent. required the catheter.

The catheter was used equally in both sexes; it is required more often in those of a nervous temperament, and in cases in which much packing is required in the anal canal. From these figures it is obvious that the catheter is more often required after the ligature operation than in the case of the other two. Tuttle states that strangury and dysuria are almost inseparable from the ligature operation, and does not remember a single case where this method was used in which it was not necessary to catheterize the patient for some days or even weeks afterwards. This has certainly not been our experience at St. Mark's Hospital. To induce the patient to pass urine, hot fomentations are applied to the hypogastrium, and, if this is not sufficient, the patient is allowed to stand up at the side of the bed. In those cases in which the catheter was passed it was, as a rule, required once only, but in other cases it was required until the bowels were moved on the fourth day. About nine months ago I ordered Imperial drink—acid tartrate of potassium gr. 60, saccharin gr. 1, ol. limonis ♏ 111, aq. dest. 1 pint—to be given freely to the patients after operation, and since that time I have only twice had to use a catheter after an operation for haemorrhoids. This acts as a diuretic and a sedative to the urinary passages, and it is heartily to be recommended.

The Return of Sphincteric Control.

There is always a certain amount of loss of control after the stretching of the sphincters, and this is also accounted for by the loss, more or less, of the sensitive lining of the anal canal. In the majority of cases the sphincters regain much of their tone as soon as the patient comes round from the anaesthetic, as can be seen and felt by anyone at the completion of the operation, but it is well that the surgeon should ascertain before operation the state of the sphincters, and not stretch all alike as a matter of routine. There are many cases of prolapsing haemorrhoids, especially in old people, in which the sphincters have been stretched daily for years from above downwards by the prolapsing piles themselves. If during operation these cases be treated very gently and the sphincters stretched as little as possible, few cases of "loss of control" follow the operation. In the 300 cases under consideration, the return of control and of the so-called "rectal sense" were ascertained in the three following ways:

(*a*) By the ability of the patient to retain a one-pint enema.

(*b*) By the patient getting the proper warning before defaecation.

(*c*) By the ability of the patient to distinguish between the passing of flatus and motion.

In the clamp and cautery cases control returned on an average on the sixth day after the operation. In the ligature cases control returned on the tenth day; in one case control returned on the fourteenth day, which was the maximum. After the Whitehead operation, control returned about the twelfth day; the longest period before control returned after this operation was the twenty-fourth day. The age of the patient did not seem to influence much the return of control, except in a few cases between the ages of 50 and 70 submitted to the Whitehead operation, in which control was somewhat longer in returning.

Contraction of the Anal Canal.

In the series of clamp and cautery cases not one showed the least tendency to contract.

Of the ligature cases, 55 per cent. showed no tendency to contract. In 40 per cent. there was slight contraction, which was easily remedied by digital dilatation during the third and fourth weeks after the operation. In 5 per cent. there was more marked contraction, which required instrumental dilatation up to six weeks after the operation. Two cases required a general anaesthetic. They all subsequently did well and showed no further tendency to contract. These were the cases in which the piles were all ligated at the one level, or in patients who had to leave the hospital early and did not carry out efficient digital dilatation.

After the Whitehead operation, 36 per cent. showed no tendency to contract, and these were cases in which there was very little retraction of the mucous membrane. In 56 per cent. there was slight contraction, which was easily overcome by digital dilatation during the third and fourth week and showed no tendency to recur; in these cases there was retraction of the mucous membrane to the extent of ½ in. In 8 per cent. there was decided contraction; 4 of these were due to sepsis and ulceration following the operation, these were cases of sloughing and gangrenous prolapsed piles and the mucous membrane retracted to the extent of an inch. Of these 4, 2 had secondary haemorrhage. The other 4 cases showed retraction from ½ to ¾ in.; they either left the hospital too soon, or neglected to come back early to have further dilatation carried out. All of these 8 cases had instrumental dilatation twice a week for periods from two to three months. The stenosis in all these cases has been overcome, and though there is felt a fine fibrous ring or ridge encircling the anal canal, the finger passes in easily, and certainly none of these patients complain of any difficulty in defaecation. No case of Whitehead's operation healed by first intention, and the amount of contraction depends on the amount of retraction of the mucous membrane from the anal margin.

Development of Tags.

Tags which are of the nature of external haemorrhoids are swellings of varying size consisting of skin and connective tissue which develop around the anal margin. They are due to interference with the return of blood from the anal margin, and to the trauma and localized inflammation caused by the operation. The larger ones contain thrombi. They may arise either in the situation of already present external haemorrhoids, or in anal skin where there was little or no evidence of external haemorrhoids before operation.

In 50 per cent. of the clamp and cautery cases, in 40 per cent. of the ligature, and in 70 per cent. of the Whitehead

cases, there was practically no formation of tags after the operation, or at most a very slight swelling at the anus which subsided within ten days. In 44 per cent. clamp and cautery cases, in 45 per cent. of the ligature, and in 25 per cent. of the Whitehead cases, there was decided tag formation, which subsided in from four to twelve weeks after the operation, leaving almost a smooth anus, or at most two or three elevations around it.

In 6 per cent. of the clamp and cautery cases, in 15 per cent. of the ligature cases, and in 5 per cent. of the Whitehead cases, there developed rather large tags, which required removal under a local anaesthetic during the third week after operation. One clamp and cautery case and one ligature case required a general anaesthetic for the removal of a ring of large tags. Most tags subside if left alone, or if some astringent like strong lead lotion is applied daily; but if the tags are large, and especially if thrombi are present in them, they are better removed. The removal of two or three tags leaves the anal margin very tender for a few days, causes some pain during defaecation, and renders digital examination more trying. Thus removal of tags rather encourages contraction owing to the difficulty in carrying out digital dilatation. Tags may give rise to no symptoms, or they may cause pruritus, or become fissured and eczematous if large; they may cause difficulty in cleansing the anus after defaecation. In hypersensitive patients the occurrence of tags may lead them to suppose that the piles have not been efficiently dealt with.

Haemorrhage.

Eight cases of post-operative haemorrhage occurred in the series of 300 cases under consideration.

(*a*) In the clamp and cautery cases there was one case of accidental haemorrhage due to the carelessness of a nurse. This patient required an anaesthetic, and some vessels were ligated. No case of recurrent or secondary haemorrhage followed the clamp and cautery operation.

(*b*) After the Whitehead operation there was no case of recurrent haemorrhage, but two cases of secondary haemorrhage occurred—one on the sixth day and one on the eighth day following operation. These were two cases of gangrenous prolapsed piles in which sepsis occurred. One was treated by packing, the other required an anaesthetic and the use of the cautery. The septic condition was soon overcome, and no more haemorrhage occurred, but these were two of the cases which had marked contraction, requiring instrumental dilatation for about two months.

(*c*) After the ligature operation there was one case of accidental haemorrhage, caused by the patient interfering with his dressing. There were two cases of recurrent haemorrhage, both controlled by packing without an anaesthetic, and two cases of secondary haemorrhage occurred, one on the ninth day and one on the tenth day following operation. Both were given a general anaesthetic, and in neither of the cases was there any sepsis or ulceration. In one case an artery required ligation, and in the other there was venous oozing, which was arrested by packing. It is difficult to account for the haemorrhage in these cases. Though these patients lost blood to the extent of from 1 to 2 pints, it did not seem to hinder their pregress towards recovery. Calcium chloride was given internally for a few days and the patients put upon a tonic containing iron, whilst the diet included iron-containing foods—for example, spinach, eggs, apples, etc.

Abscess, Fistula, and Ulceration.

None of these complications ensued after any of the clamp and cautery operations.

After one ligature case, in which six piles were ligated, there developed a perianal abscess, which was opened; this left a small fistula, which was treated by operation. Two cases treated by ligature developed a form of chronic infective ulceration. This was treated by the application of nitric acid, and for many weeks by antiseptic rectal injections. Six months from the onset zinc cataphoresis was commenced and carried out every fortnight for many months. The ulcerative process was arrested after about a year, but in healing a fibrous stenosis of the rectum followed, which is treated by instrumental dilatation every month or so.

After one Whitehead operation a small fistula developed which was easily cured by operation. Four of the Whitehead cases were complicated by sepsis, and three of these occurred in cases of gangrenous prolapsed piles. Retraction occurred to the extent of 1 in.; there was some submucous infiltration and thickening under the retracted edge, whilst the ulcerated area was covered with a thin greyish slough, and bled easily. In these three cases the sepsis was arrested within ten to fourteen days, as evidenced by the temperature subsiding, discharge becoming less, pain and tenderness ceasing, the slough disappearing, and the retracted area becoming covered with healthy granulations. There was marked contraction during cicatrization later on, which was subsequently remedied. Of these three, two had secondary haemorrhage. The fourth case was a female patient who had slightly more contraction than usual, and must have infected herself in carrying out digital dilatation at home, as she was quite well when she left the hospital a month after the operation. The cicatrizing area had broken down, and there was ulceration extending the whole length of the anal canal. Glands in both groins were removed, but she developed pyaemia, and in spite of all treatment seemed to be dying, when suddenly a reaction set in, and she is now doing well.

The clamp and cautery operation seems to be that least likely to be followed by sepsis. The clamp draws the edges of the mucous membrane together, and as the wound is in the long axis of the bowel, there is no tension and little retraction. The cautery effectively seals the mouths of the blood vessels and lymphatics, thus preventing absorption. The absence of all ligatures and sutures is also in favour of the operation being cleaner. In the ligation operation more or less of the ligated pile is left to slough, and this necrosed material becomes a source of sepsis, whilst the ligatures themselves become foul, and usually do not separate for nine days or so. Indeed, it is surprising to find how few cases after this operation are followed by sepsis.

After the Whitehead operation those cases that are complicated by sepsis have been in rather a septic condition before operation, due to the piles becoming prolapsed and gangrenous. In such cases more active antisepsis should be employed before, during, and after the operation. No case of tetanus followed any of these operations.

Recurrence.

All the cases have been examined up to six weeks after the operation—many have been seen months afterwards, and some a year to eighteen months after the operation, and in no case has there been any recurrence; in fact, recurrence after operation seems to be rare. During eighteen months in the out-patient department (apart from the cases under consideration) only 2 cases of recurrence were noted—one in a patient who had been operated on two years previously by local excision with suture (Earle's method), the other had been operated on by ligature eighteen years previously.

Duration of Treatment in Hospital.

The clamp and cautery cases remained in hospital on an average ten days; the ligature cases for twenty-one days; the Whitehead cases for about twenty-six days.

Healing of the Wound.

During the first week after the clamp and cautery operation three soft linear ridges can be felt in the rectum. During the second week the clamped edges of mucous membrane separate a little, and the wound becomes covered by healthy granulations which feel soft and granular; these wounds gradually close, and four to six weeks after the operation three soft linear scars are felt, and, if no tags complicate the case, it would be difficult to say that an operation had been performed. The great objection to the clamp and cautery operation is the possibility of the formation of large tags, the inner surface of which may become granular and inflamed, and cause tenderness during and after defaecation. The fact that no contraction ever occurred is greatly in favour of this operation.

During the first week after the ligature operation, three triangular wounds, with the base downwards, are felt, with the knots of the ligatures above, and more or less slough from the ligated piles lying in the anal canal. The ligatures separate from the seventh to the twelfth day, and then the triangular wounds gradually close in, though the surfaces still feel granular. During the third and

fourth weeks the wounds become smoother and more linear, and there may then be noticed more or less contraction of the anal canal, the stenosis being most marked where the ligatures have been applied—that is, at the upper part of the wound. In six to eight weeks the anal canal feels fairly smooth, but a few subsiding tags may be present at the anal margin.

The day following the Whitehead operation there may be noted more or less ecchymosis into the perianal tissues and a little oedema at the anal margin. The fact that no vessels are ligated in this operation, and that the suturing of the mucous membrane to the skin edge controls the haemorrhage, accounts for the ecchymosis and oedema. By making the patient strain down one can see that the line of the suture is intact, or by gently inserting the finger the mucous membrane can be felt in close apposition with the skin. This condition goes on until the fourth day, when in 50 per cent. of the cases the sutures give and the mucous membrane retracts before the bowels are moved; in the other 50 per cent. retraction occurs when the bowels act or on the day following. Not one of the cases healed by first intention, and, though this may seem a startling statement, nevertheless I firmly believe that primary union never occurs after the Whitehead operation.

The giving of the sutures and the retraction is due to the tension on the wound, to the action of the sphincters, and perhaps to a little sloughing at the wound edge. It makes little difference what suture material is used. In the majority of these cases continuous and interrupted iodized catgut sutures were used, whilst in some silk and in others silkworm gut were tried. That the retraction is due to tension is supported by the fact that in the perineal and ano-sacral excision of the rectum the upper cut end of the rectum or of the pelvic colon may be implanted at the anal margin, and the sutures hold quite well. This occurs when the bowel has been made sufficiently free to be brought to the anal margin under no tension. It is well that the wound after the Whitehead operation does not heal by first intention, as otherwise exstrophy of the mucous membrane might occur, giving rise to excoriation, slight haemorrhage, pruritus, and troublesome discharge of mucus. Exstrophy did not occur in any of the cases under consideration. During the second week after the operation the circular ring of granulation tissue left by the retraction of the mucous membrane is felt to be distinctly granular. During the third week this area becomes smoother and smaller, and any tendency to contraction becomes evident. During the fourth and fifth weeks the mucous and skin edges come gradually into apposition, and the annular cicatrix feels quite soft if digital dilatation has been properly carried out. This cicatricial ring, if properly stretched when the fibrous tissue is still young, shows no further tendency to contract after the sixth to eighth week. Some of these cases have been seen a year afterwards, and the seat of operation feels quite smooth, or at most a fine fibrous ring is felt at the junction of skin and mucous membrane, but in none of the cases is there any stenosis which would cause difficulty in defaecation.

Choice of Operation.

It is better not to decide on any particular method of operation until the sphincters have been stretched, and then to use the method most suitable for the pathological condition presented.

The clamp and cautery operation should be chosen when there are not more than three piles, especially if they are of the internal variety and there are no external haemorrhoids or redundant skin. As it is likely to give less pain than the other operations, it should be chosen for patients of a very nervous temperament. As it is a bloodless method it is suitable for cases of anaemia. If time is an important question, either for the patient who may want to get back to important business, or in hospital where there is usually a large waiting list, the clamp and cautery method should be chosen, as the period of convalescence is considerably shortened. As stenosis never follows this operation it should be used in cases in which the surgeon may be unable to see the patient again after the operation.

The ligature operation is a good and safe method, and is applicable to the majority of cases of haemorrhoids. It is suited for those cases of three, four, or five piles, especially of the mixed variety, when both external and internal haemorrhoids can be removed at the one cut. Though the conditions be less aseptic after this operation than after the others, it is a well-known clinical fact that sepsis rarely follows this operation.

The Whitehead operation is indicated in the following conditions:

(*a*) When there is a general haemorrhoidal condition involving the whole circumference of the anal canal, and especially if there is a good deal of prolapse, and also in cases in which there is extensive thrombosis.

(*b*) In cases where, though the piles may not be large, there is a pathological condition which may be described as a prefissure or a prefistula state. In this condition the anal valves are enlarged, and curious little blind submucous pockets may be found running for a varying length upwards. In other cases these pockets run downwards towards the anal margin. These, first described by Mr. F. C. Wallis, and lately believed to be due to developmental defects, are undoubtedly in many cases the starting point of fistula; whilst, if Ball's theory be accepted, enlarged anal valves lend themselves to the formation of fissure.

The Whitehead method should not be employed in all cases of haemorrhoids, but is well suited for the conditions mentioned above. If the after-treatment is properly carried out, stenosis should not occur.

I have to thank Mr. F. S. Edwards and Mr. F. C. Wallis for their kindness in allowing me to publish this record of cases.

ACUTE NECROSIS OF THE PANCREAS: SUDDEN DEATH.

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Instances of sudden death due to pancreatic haemorrhage are of such rare occurrence that the following case is worthy of record:

Mrs. J. D., a widow aged 61, was admitted to this asylum in February, 1908, suffering from melancholia of one month's duration. As far as I could ascertain, she had an excellent family history, both physically and mentally, her mother reaching the age of 80. At the birth of her first child she had an attack of melancholia, and my informant tells me that she also suffered from "milk fever" on that occasion; in 1886, at the birth of her last child, an exactly similar state of affairs occurred. Nine years ago she was suddenly taken ill during the night, complaining about her heart as though it would stop beating. Her extremities, her son says, were very cold, but as far as he can recollect there was no sickness. She has had since then three attacks of melancholia. Previous to the penultimate attack she contracted influenza.

Condition on Admission.

She was in very indifferent health, though there were no signs of any organic disease. She was put on tonics and extra diet for a time, and steadily improved in condition and health. Mentally her progress was not so rapid, but at the time of her death she was quite bright and cheerful, and it had been intended to discharge her very shortly. On August 12th, 1909, while in bed, she was suddenly taken ill at 1.30 a.m. with violent pains in the abdomen and sickness, and died within a quarter of an hour.

Necropsy.

The *post-mortem* examination, made the next morning, showed as follows:

External Appearances.—Cadaver in good condition; no bruises or other marks of injury present.

Head.—Calvarium normal; membranes normal; no macroscopic abnormality of the cerebral tissue; cerebro-spinal fluid scanty; arteries at base of brain very atheromatous and of small calibre, that of basilar at pons medulla junction being 3 mm. Right interior carotid, 2½ mm.; left, 2 mm. Middle cerebrals each 1¾ mm. Distribution regular.

Thorax.—Ribs normal; no pulmonary congestion; some emphysema present. Heart not contracted, cavities containing more or less blood; slight fatty degeneration present. Aorta very atheromatous; valves competent.

Abdomen.—Here considerable effusion of blood into the tissue around the pancreas was at once apparent, but the peritoneal covering was not broken. Kidneys, liver, and spleen were congested. The stomach showed some catarrh, and the intestines were normal. Dimensions of cardiac orifices were: Mitral, 3½ in.; tricuspid, 4; aortic, 2½; pulmonary, 2½.

Weights of Organs.—Brain, 42 oz.; heart, 11; lungs—right 15½, left 21; spleen, 5; kidneys—right 3, left 4; liver, 52; pancreas, 4.

Pancreas.—There was a gangrenous area in the head of the organ, about the size of a filbert, from which it was evident the haemorrhage had come; the whole gland was infiltrated with blood and the seat of marked rapid tissue changes; on the surface were numerous sandy grains consisting of calcium phosphate. There was no evidence of fat necrosis, nor of obstruction in the ducts.

This case is of great interest, both from a medico-legal and scientific point of view.

1. There was a more or less obscure history of a somewhat similar seizure occurring nine years ago.

2. The death was evidently syncopal; whether brought about reflexly by interference with visceral ganglia or the solar plexus, or due to the escape of pancreatic ferment in large quantities into the blood it is impossible to say.

3. The majority of these cases occur in males; out of Korte's series of 41 instances, only 4 were females.

4. The etiology is extremely obscure. In this case there were two facts which may have a bearing on it: (*a*) Marked atheroma, and (*b*) the peculiar deposit of calcium phosphate on the surface of the pancreas. Whether this is an instance of *post hoc* or *propter hoc* it is extremely difficult to say; its formation is well known to be associated with rapid nuclear disintegration, and its presence may be accounted for in that way. Personally, I am inclined to the *propter hoc* theory, as there were several very large granules near the broken-down portion of the organ, too large to be formed in this rapid manner, and also on account of the fact that the distribution of these grains of phosphates was not throughout the organ, but only superficially.

A CASE OF "CONGENITAL PYLORIC STENOSIS" SUCCESSFULLY TREATED WITHOUT OPERATION.

BY

E. MOUNTJOY PEARSE, M.R.C.S.ENG., L.R.C.P.LOND.,

LISKEARD, CORNWALL.

THE opportunities afforded of observing a case of so-called "congenital pyloric stenosis" from the very onset are surely uncommon. The subject of this paper is my own child, a little girl.

She was born on September 1st, 1908. Labour was natural. The child weighed at birth 7 lb., and was in every way normal. She was fed on the breast alone for three weeks, at the end of which time she began to be sick almost immediately after taking her feeds. Thinking modified cow's milk might suit her better, she was on September 23rd put on milk and barley water with sodium citrate (gr. j ad ℥j of milk), as recommended by Poynton. For forty-eight hours there was no sickness to speak of, but then it returned, and every feed was vomited as soon as it was taken. Her weight at the end of one month was the same as at birth. Imagining the food to be still the cause of the trouble, we replaced the milk and barley water with Allenbury No. 1, and again for about forty-eight hours the vomiting was much relieved. On October 4th a further change in the diet was made, "bread jelly," as recommended by Cheadle, replacing the Allenbury No. 1. On October 5th no nourishment was retained at all, each feed being vomited practically immediately. On October 6th we attempted small feeds (℥j) of peptonized milk and lime water, a certain number of which were retained. The bowels were constipated, and means had to be taken to get them to act. The nursing of the child was being carried out by the mother, a hospital nurse of great experience; this, of course, excluded any possibility of error in measuring out feeds or irregularity of time in giving them, or any doubt as to the absolute cleanliness of all vessels used in connexion with the food. The vomiting was not accompanied by retching; the food was immediately, so to speak, pumped up and shot out, sometimes quite forcibly. The chronic vomiting, unassociated with any evidence of gastric disturbance and not relieved by careful nursing and changes of food, now suggested that pyloric stenosis might be the cause of the mischief. On October 6th a feed was given to the child when it was undressed, and we were able to see well-marked peristaltic movements in the epigastrium culminating in a vomit. This observation was confirmed on several subsequent occasions by my partner, Mr. R. Hingston, to whom I am deeply indebted for much help and encouragement during the trying conduct of this case. The child was now naturally losing weight and was very fretful night and day, constantly screaming out with colicky pain, which invariably followed if a feed were retained. The weight had fallen from 7 lb. to 6½ lb. My attention was now directed to an article by Dr. R. Hutchison[1] dealing with the subject of congenital pyloric stenosis, and this showed me that without doubt we had a case of this condition to deal with, the baby having all the classical signs and symptoms—namely:

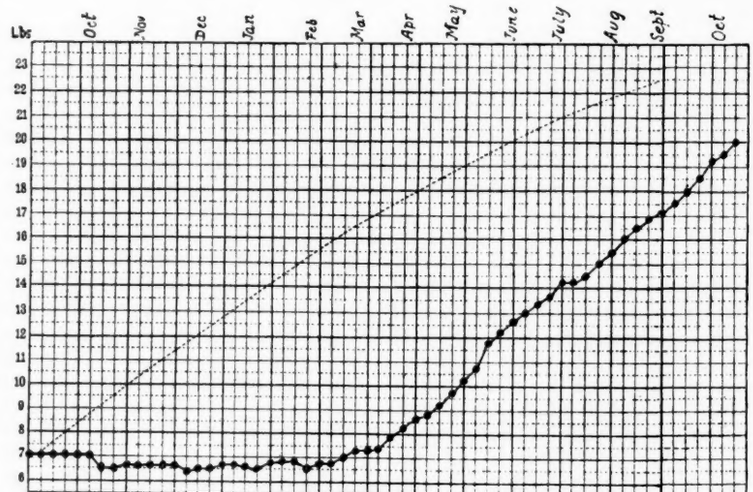
1. Vomiting of a projectile nature coming on almost immediately a feed was taken down, with absence of any sign of gastric disturbance.
2. Loss of weight.
3. Constipation.
4. Visible peristaltic movements in the epigastrium, culminating in a vomit.
5. Relief of the symptoms for a period of a day or so by changing the food.

I sent Dr. Hutchison full details of the case, and he most kindly wrote advising me as to treatment; and I must here express my most grateful thanks to him for his generous advice and help, both then and on many subsequent occasions, whilst the case was under treatment, the successful result obtained being entirely due to the means which he suggested.

On October 23rd, the child being now 7 weeks old, and slowly but steadily losing ground, we began the treatment suggested by Dr. Hutchison, consisting of: (*a*) Daily washing out of the stomach; (*b*) small feeds (℥jss at a time) of *peptogenized* milk and water, half and half; (*c*) Purgen (half a tablet of "Infant Purgen") at night to relieve the constipation. She was also given a small amount of Kepler malt extract and cod-liver oil daily.

The effect of washing out the stomach was little short of marvellous; the fretfulness disappeared at once, and only on one occasion during the time gastric lavage was carried out once daily (and this lasted from October 23rd, 1908, till March 24th, 1909, a period of five months) did the little patient show any signs of abdominal discomfort, and then she was immediately washed out, with the result that the discomfort was at once removed. The operation of washing out the stomach was most easily performed. A glass funnel and a soft rubber No. 12 catheter were used; the end of the catheter was dipped in glycerine and placed on the infant's tongue, when she began to swallow the tube, and so rendered the passing of it a very simple matter. The operation never made the child cry nor appear inconvenienced in any way.

The child's weight remained about 6½ lb. until the middle of January, 1909, when she was 4½ months old. She was a mere skeleton, and the points of bone at the back of the iliac crests and the spines of the sacral vertebrae looked as if they might perforate the skin at any moment, and were only prevented from doing so by carefully changing her position from time to time, not allowing her to lie on the back or one side for too long; she moved her limbs very little, there being extremely little muscle to perform any movements with. In spite of her emaciation, which was extreme, she never looked cachectic, and always seemed happy and comfortable, thanks to the gastric lavage.



Dotted line shows average weight at different ages.

From November 26th, 1908, to January 20th, 1909, the abdomen was massaged twice daily with cod-liver oil, but this was not continued longer, as there was no evidence of benefit from its use. At the beginning of February, 1909, on the advice of Dr. Hutchison, we began giving raw meat juice to counteract any ill effects of the prolonged diet of peptogenized milk, and "Glaxo" was given for alternate feeds; also one feed of weak Benger's food was each day substituted for one of the peptogenized milk feeds. By the end of February, the child being now

6 months old, she had begun to gain in weight a little, and scaled 7 lb.—the weight she was when born. Virol was now given in place of the Kepler malt extract, and in the middle of March one feed a day of Savory and Moore's food was begun in the place of Benger's. By the end of March the child was gaining fairly steadily, as will be seen by the weight chart. The peptogenized milk was stopped, as was also the raw meat juice, and we ceased to wash out the stomach, the indication for the latter being that the wash-out no longer showed retained curds in the stomach. She was now put on a mixture of raw milk and barley water, with the necessary amount of sodium citrate.

The child was vaccinated on May 17th, being now 8½ months old; she was not upset at all by this, in fact the week following she showed her biggest gain, namely, 1 lb. She cut the two lower central incisors during the second week in June.

The volume of the feeds and the amount of the milk were gradually increased as the child's capacity for taking in got greater, and in due course one feed a day of Mellin's food and one of Chapman's wheat flour were added to the dietary. I should have stated that the Savory and Moore's food was stopped as soon as the child was able to take the milk and barley water mixture. At the commencement of July, being 10 months old, the patient weighed 14 lb.; she was small for her age, but fat and a capital colour; an extremely bright and intelligent child, and wonderfully happy and contented. The bowels were acting without any trouble, she was never sick, and there was nothing to suggest that the stomach was at all dilated. There is nothing further of special note to chronicle. The child now, in the middle of October, is 13½ months old, weighs 20 lb., has cut six teeth, and can stand when holding on to any object. Although she is, of course, behindhand for her age, she is apparently in robust health, and shows no signs of rickets or dilated stomach. The diet has naturally been suitably altered and augmented to bring it up to the requirements of her growth, though she cannot yet quite manage the food of the ordinary healthy infant of corresponding age.

This case presents one or two points of exceptional interest.

1. So far as I know, most, if not all, of the recorded instances of congenital pyloric stenosis have been in male children.

2. The case was under medical supervision from birth.

3. Improvement did not begin till the child was 6 months old, whereas the spasm usually passes off at an earlier date.

4. There were never any convulsions due to the absorption of toxic material from the stagnated contents of the stomach; this was directly due to the daily washing out of the stomach, which, begun early in the treatment of the case, prevented gastric dilatation taking place.

It is interesting to note in this connexion that in the case recorded by Dr. Harper in the *Lancet* of August 19th, 1905, where no washing out of the stomach was done, convulsions were a very frequent and most distressing complication.

5. Ever since the child was a week or two old she has been accustomed to spend as many hours a day as possible out in the open air in her perambulator, this even when the ground was deep in snow in the winter; she was always the better for being out, and was never kept in except for rain. She never suffered from cold, even when she was extremely emaciated.

6. Throughout her illness from the moment the gastric lavage was commenced the child slept on an average from eighteen to twenty hours a day, and doubtless this had much to do with maintaining her vitality, and so enabling her to weather the storm.

REFERENCE.
[1] *Clinical Journal*, September 9th, 1908.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

RECURRING APPENDICITIS: RIGHT OÖPHORITIS IN ASSOCIATION WITH MODIFIED GRAVES'S DISEASE.

During the last three months in the course of my practice I have come across three cases which, taken singly, might each be accounted for by coincidental existence of two diseases in one person, but taken collectively it is somewhat improbable that they can be explained in this way. I am unaware of any literature dealing with the point I am about to mention, and I should be glad to know if any other medical man has had a similar experience, or has entertained the idea of any causal relationship between the two. The two diseases mainly concerned are chronic or recurring appendicitis with involvement of the right ovary, associated with a modified form of Graves's disease. The following is a brief account of the cases:

T. D., aged 23, member of the dramatic profession, single. In April of this year I first saw her on account of colicky pains of an "excruciating" character in the right iliac region associated with nausea, and a slight temperature with foul tongue and constipation. There was a history of two similar previous attacks. On examination, there was definite tenderness over the appendix, and the right rectus was resistant. With rest in bed and suitable treatment the attack subsided, and the patient refused or postponed operation. In June a similar attack occurred, and again in August. The right ovary is tender and somewhat large, and there is profuse leucorrhoea. I saw this patient again on September 1st, and then found a palpable thyroid gland, a definite fine tremor of the hands, and a pulse of 110—in other words, a modified form of Graves's disease. This patient is habitually constipated and has a foul tongue, unless freely treated with aperients.

M. J., lady governess and nurse, aged 25, single, first came to me in June, complaining of pain of a colicky nature referred to the umbilicus; had had attacks of pain at intervals for a year, profuse leucorrhoeal discharge, menorrhagia, and dysmenorrhoea for several months, constipation, and foul tongue. This patient also complained of acute depression and "tedium vitae." At this time there was nothing definite to go upon, but a month later she came to me feeling better as regards the depression, but complaining of the pain being still present at times, and a constant dull ache in the right ovarian region. I examined her, and found a definite lump in the appendix region, slight rigidity of the right rectus, and bimanually the right ovary seemed larger than the left, but of this I could not be certain. As the patient was leaving for home I wrote to her mother, and advised that the local doctor should be called in. This more especially as the patient then told me, what she had not before mentioned, that she had had a temperature for some weeks on and off, associated with the pain. This girl had, in addition, fine tremor of the hands, pulse 110 to 120, for one month, during which I had her under observation, and her thyroid was distinctly enlarged, she herself volunteering the statement that sometimes her neck seemed larger than at others.

R. S., hospital nurse, aged 23, single, first came to me twelve months ago with very marked tremor, pulse 120 to 130, enlarged thyroid gland, complained of feeling excessively tired during and after her hospital work. She was then doing special work, massage, etc., and was just going to commence full training at another London hospital. I advised her not to attempt it for twelve months, but to rest. For various reasons she could not rest completely, and obtained a post at a nursing home. Her symptoms did not respond to treatment of various kinds, but this I attributed to the well-known uncertainty of drug treatment in this condition, and the absence of sufficient rest. Six weeks ago she was travelling on the Continent with a patient, and was forced to come home owing to acute abdominal pain (generalized), with diarrhoea and passage of mucus and blood. She tells me that for months she had a temperature now and then of 99.6°, and had also had previous attacks of pain. I was called to her, and found her to be tender all along the whole course of the colon, but with no localized pain. The next day, however, her right rectus became rigid, and I decided to operate. On opening the abdomen, clear straw-coloured fluid presented in the wound. The appendix, which measured 3½ in., was found to be closely bound down to the colic wall along its whole length, with the exception of the last ½ in., but it was not in an acute inflammatory condition. I dissected it off and amputated it, and then looked for the more recent cause of the pain. The right ovary was enlarged and had a cyst on its outer end, which had burst and was obviously the source of the fluid found on incising the peritoneum. The left ovary being apparently healthy, I removed the right one, and, after swabbing up all the fluid within reach, closed the abdominal wound. The patient has made an uninterrupted recovery from the operation, and, what is to my mind by no means the least important point as bearing on this communication, her pulse has never since the operation been above 84—it is now 76—the tremor has almost disappeared, and the thyroid is less prominent, though still slightly enlarged.

These three cases, as I remarked above, seem to me collectively to point to a definite connexion between the two coexistent conditions. Whether they have a common causal factor, or whether one is causative of the other, I leave it to the future and the experience of others to decide, but that there is something more than coincidence in the coexistence of the two sets of symptoms in these three cases, I am convinced.

Of the first two cases, I very much regret that in one operation has been up to now refused, and in the other I have not yet any definite information, and therefore operative proof is not, so far, obtainable, but personally I am convinced that appendicitis was present. My own view is that the appendix trouble, either primarily or secondarily through the ovary, causes a sympathetic disturbance, which produces this modified Graves's disease.

I do not think that any one will quarrel with me if I say that the pathology of Graves's disease is still an open

question. I mean as to whether the primary causal factor is sympathetic or thyroid; and, if the latter, as to whether it is due to hypersecretion or perversion of secretion. But in either case it seems to me that the appendix, being in a morbid condition, may quite possibly start a morbid condition either of the thyroid gland or the sympathetic nervous system, and in support of my view I state the three cases above.

I trust that this communication may result in the relation of similar experiences by other practitioners, or that it may call the attention of the profession to what I believe to be a hitherto unrecorded connexion of two diseases.

ERNEST STRATFORD, M.R.C.S., etc.

Wellington College Station, Berks.

MENINGOCELE PRESENTATION.

I WAS called to a primipara, aged 28, in whom labour had commenced a fortnight earlier than had been expected.

Examination of the abdomen gave very little help as there appeared to be a large amount of liquor amnii present. On vaginal examination an indefinite mass was felt through the os, which was about the size of a half-crown. On returning to the case later, the os was about the size of a crown piece, and the mass was more prominent. It had the feeling that the placenta gives, yet this was hard to understand, for there had been no haemorrhage. Anteriorly to the mass and behind the symphysis pubis a slight depression could be felt not unlike the posterior fontanelle. Posteriorly another depression could be felt like the anterior fontanelle. Pains became frequent and strong, and the mass showed at the vulva during the pains, returning again as they subsided.

Being unable to make a definite diagnosis without anaesthesia, I asked Dr. Reichwald, of Ashtead, to assist me. Meanwhile the liquor amnii had escaped. Examination of the abdomen under an anaesthetic showed the head to be in the left top corner of the uterus. Beyond this nothing definite could be made out. The whole hand was introduced and the mass was found to be attached to the fetus. Posteriorly another smaller mass could be detected. Both legs were extended. Bringing down first one leg and then the other, the fetus was partially withdrawn and the mass proved to be a meningocele, somewhat larger than a cricket ball, attached to the lower lumbar region. The smaller mass posteriorly was the oedematous scrotum. The depression felt was the gap in the spinal column where the meningocele arose. Both arms were extended above the head, and, after getting them down, a stillborn fetus was delivered.

Oxshott, Surrey. THOS. C. BLACKWELL, M.D.Edin.

BELLADONNA POISONING BY THE APPLICATION OF A PLASTER.

M. M. G., aged 74, fell downstairs in August, striking her back about the level of the scapulae. On examining her on August 18th I found she had only sustained contusions, but as she complained of pain I applied two strips of belladonna plaster over the painful part. At my second visit she stated that she was greatly relieved, and I ceased attending.

On the afternoon of September 26th I was again sent for and informed that she had fallen while in the garden, and it was thought she had "a seizure." I found her in bed, very delirious, with the pupils moderately dilated, but no paralysis. Over the lumbar region she had a "porous" belladonna plaster, and outside this was adhering a portion of the plaster which I had previously applied higher up. The whole of the surface underneath the plaster was raw, and absorption of the belladonna had taken place through the raw surface. I removed the plasters, and on the following day she had quite recovered. The history she then gave was that, having found relief from the plasters I applied, and having a pain in the lumbar region, she had sent her husband to the chemist for a similar plaster, which she applied on September 21st. This soon produced intense itching, causing her to be constantly rubbing her back. On September 24th her sight began to be affected; on the following day the throat became very dry; and from the morning of the 26th to that of the 27th she has no recollection of what occurred.

Gunnislake, Cornwall. ALBERT BOWHAY, M.D.

A CASE OF POTATO POISONING.

ON the evening of June 17th, 1909, I was called to see a man, aged 33, a platelayer, who had been taken suddenly ill that afternoon while at work, with vomiting and diarrhoea, having felt perfectly well beforehand.

I saw him at 6.30 p.m., when he told me that at 3 p.m. he was seized with a sudden desire to vomit, with great pains in the lower part of the abdomen; this was followed by persistent vomiting and diarrhoea. At 6 p.m. cramp commenced to come on, starting in the lower part of the abdomen and affecting the muscles of the thighs, arms, and hands chiefly; the cramp was so bad in the thighs that it was some time before I could get him to lie down on a bed to be examined; his voice also seemed to be affected. He was given calomel, followed by mist. alb., and at 8.30 p.m. the pain ceased, but the cramp continued in the back of the thighs till 2 a.m., when he fell asleep. On awakening he felt quite well, and was able to come and see me.

His diet on June 17th consisted of bread and butter and tea for breakfast, and meat and new Jersey potatoes for dinner at 12.30 p.m., of which his wife and children also partook; he ate about a dozen potatoes, but noticed that fully one-third of them were quite green. I understand that solanin is present in these green potatoes, which are those that grow exposed on the top of the ground, and also in those sprouted ones that are stored exposed to light.

This case may be of interest to those who practise in country districts, where potatoes form the chief article of diet in the cottages of the labouring men.

C. A. EAMONSON RING, F.R.C.S.E.

Brinklow, near Coventry.

A CASE EXHIBITING THE TOXIC EFFECTS OF ETHER.

PROFESSOR DIXON, in his address on "Facts and Fancies in Pharmacology,"[1] mentions that the effect of ether is to depress nerve tissue, and in large doses muscle tissue too. As an illustration of those statements I will give the history of a case recently under my observation. A man aged 46 states that he first began to inhale ether as a means of obtaining relief from pains in his chest and body, which were the result of indulgence in alcohol, but he only occasionally made use of this means. However, for the last two months he has been more or less constantly inhaling ether, 6 drachms at a time, and getting through a 1 lb. bottle of ether a day, consequently he has been bedridden for weeks, and had lost flesh rapidly and to such an extent that he was unable to stand without help; moreover, the circulation was so feeble that he had hot-water bottles to keep his feet warm. For the last week he had been fed per rectum, partly because he refused to take anything by the mouth, and also because of troublesome hiccough and sickness which followed food given by the mouth. Gradually he became quite apathetic, taking no interest in his surroundings until he reached a stage in which he was quite irresponsible for his words and actions, so that he had to be placed under some restraint and carefully nursed away from his home; I hear he is now progressing satisfactorily, though still very weak mentally and physically. As there was no wasting before he took to bed, and considering the large quantities of ether which were inhaled—no other drug or alcohol being taken—it is reasonable to assume that his present condition is due entirely to the large and continual doses of ether.

During the time he was under my care I never saw any signs of paralysis, nor had he any shooting pains in the legs or other signs of neuritis elsewhere. The patellar reflex was just obtainable, but, as he resented interference, I could not make any detailed examination.

Althorpe, via Doncaster. J. F. ROBERTSON.

[1] BRITISH MEDICAL JOURNAL, August 28th.

THE late Mr. Alexander Fleming bequeathed £10,000 to the Western Infirmary, Glasgow.

THE United Services Medical Society opened its winter session on October 13th at the Royal Army Medical College, Millbank, S.W. In the course of a short address, the President, Surgeon-General A. M. Branfoot, C.I.E., suggested that special attention should be paid to neurasthenia as a disease responsible for a great deal of inefficiency in the Services.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, October 25th, 1909.

Samuel West, M.D., F.R.C.P., President, in the Chair.

Legislation in Regard to Anaesthetics.

Dr. Frederic W. Hewitt, in a paper on the need for legislation in regard to anaesthetics and the line it should follow, said that many accidents during anaesthesia recorded of late were undoubtedly attributable to the faulty and inadequate provisions for anaesthetization which often prevailed, and to restore public confidence and remove the present check to surgical progress certain reforms were urgently needed. The present state of the law as regards anaesthetics was unsatisfactory. Any person whatsoever might administer a general or inject a local anaesthetic for a surgical operation. The question was part of the greater question of the suppression of unqualified practice in general, and the legislation proposed would form a fitting instalment towards a more comprehensive measure. The chief difficulty lay in deciding where the line should be drawn—in other words, in defining who should and who should not administer anaesthetics. It was contended that no general anaesthetic should be administered except by a registered medical practitioner. It was also contended that that would in no way interfere with the interests of registered dentists. The new system would tend rather to raise their professional status and to free them from the present unsatisfactory and dangerous practice of single-handed anaesthetizing and operating. It would, moreover, strike a decisive blow at quack dental practice and so greatly benefit the dental profession. Inquiries instituted by him in forty-eight provincial towns with an aggregate population of 2,138,130 showed a ratio of only one registered dentist (excluding qualified assistants) to every 4,435 persons. The great majority of provincial dentists had neither partners nor registered assistants, so that unless they called in medical men to administer their anaesthetics they must either themselves administer them and then operate, or obtain the assistance of persons who were quite unfit to take upon themselves such responsibilities. The alternative to these undesirable practices was the administration of general anaesthetics by medical men. To bring that about was the object of the bill now before the Departmental Committee at the Home Office, which made the administration of either general or local (injected) anaesthetics by other than registered medical men or persons under their immediate supervision, or by a registered dentist in the course of dental surgery, or by a bona fide student acting under his supervision, a punishable offence. Reforms such as those he indicated naturally required time for their consideration, but he looked forward with confidence to the day when all members of the profession would see the necessity of some such scheme. Some extraordinary remarks on the subject had been recently made by Sir Victor Horsley before an audience largely composed of dentists and their friends. Under the erroneous impression that he was doing a service to the dental profession, he suggested that dental students should be instructed, at general hospitals, in the administration of ether and chloroform, and that chloroform, if administered by certain methods, was a safe anaesthetic. The speaker entered an emphatic protest against this mischievous doctrine, and could not believe that the medical boards of the general hospitals would sanction the instruction of dental students in chloroform administration for dental operations, particularly when the conditions of dental practice mentioned by him were borne in mind. Although he might appear to depreciate the work now being done by the dental profession, he had no such intention. He simply condemned certain antiquated and dangerous systems under which dentists were compelled to do their work—systems that shortsighted persons, under the impression that they were furthering the interests of existing dentists, would like to see perpetuated. After the evidence he had put before them, it was, he submitted, clear that the advocates of dentists administering general anaesthetics must, in present circumstances, also be the advocates of single-handed anaesthetizing and operating; if in the twentieth century they were to encourage dentists to administer chloroform and then operate, he failed to see that their profession was doing its duty to the public in attempting to reduce the present mortality from anaesthesia.

Mr. L. Matheson said that the practice of one and the same man giving an anaesthetic and performing a dental operation would gradually disappear, as there was a strong movement against it on the part of dentists. He advocated the better training of both medical men and dentists in giving anaesthetics, the more careful record of fatalities when they occurred; and, lastly, the avoidance of piecemeal legislation.

Dr. A. L. Flemming pointed out there was nothing in the training of a dentist to ensure his being qualified to deal with emergencies that might arise in the course of anaesthesia.

Dr. Dudley W. Buxton said that the main aim was to secure that the man who gave an anaesthetic was one who knew his job, and was capable of giving anaesthetics in a satisfactory manner. The man competent to give an anaesthetic in dental operations and to act with decision when the hypothetical accident occurred was the duly qualified man, and such a qualified man was the licentiate of dental surgery.

Mr. J. G. Turner thought the dangers incidental to the giving of anaesthetics were not such as they could expect the licentiate of dental surgery to cope with. In two years' hospital work it was impossible to imagine a man learning enough clinical medicine to deal with such cases. He was certain that the dangers were too great to allow the unrestricted administration of gas by the licentiate in dental surgery.

Mr. Mayo Robson urged that medical men should be taught the giving of anaesthetics in a better manner than had hitherto been done. If the bill supported by Dr. Hewitt were passed great difficulties must arise. Dentists had for many years given gas, and the number amounted to millions of cases. They gave it extremely well and with few fatalities.

Dr. J. Vincent Bell observed that in Rochester it was the custom for dentists to ask their patients who their doctor was, so that in case of a dental operation being required the medical man was asked to be present.

Mr. H. Bellamy Gardner urged that in this matter public confidence should be maintained by means of individual effort and also by collective work to avoid discredit being brought upon medicine and dentistry.

Dr. Silk said that an important point to remember was the limiting as far as possible of unqualified practice. He did not believe that the legislation proposed in a partial narrow-minded direction would have any effect in securing general protection against unqualified practice. If the dental and the medical professions were to approach unqualified practice with a well-prepared measure, he thought it would be difficult for any legislature to refuse the request.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

Thursday, October 21st, 1909.

Dr. G. A. Berry, President, in the Chair.

Presidential Address.

Dr. Berry, in his presidential address, said that it was not only educating but inspiring to realize the steps which had led to great advances, and to get some idea of the manner of thinking and the intellectual environment of their authors. Many advances were something more than rediscoveries; they were new discoveries—logical deductions from carefully collected observations and experiments, not merely irresponsible speculations. The practical man was an empiric, but now the science of medicine had not only overtaken but greatly outstripped the art; indeed, there were many reasons why treatment should lag behind. Practical therapeutics was one of the most imperfect of the arts. Surgery was perhaps the least subject to individuality, and it was in surgery that the greatest advances in treatment had been made of recent years. But the advances resulting from antiseptic surgery had led to over-confidence in, and too frequent resort to,

operative interference, and that was no doubt favoured by the public. It was merely, however, a swing of the pendulum, and would right itself in time. In medical treatment the influence of suggestion also counted for something, and the practitioner often received most gratitude and congratulation from those for whom he was conscious of having done least. Beyond increased safety in operations, the advances in ophthalmic surgery had never been commensurate with those in general surgery. Speaking of cataract, he said that in the Middle Ages the monks paid scrupulous attention to cleanliness of instruments, and they had an anaesthetic, with which patients were treated, sometimes to the extent of losing consciousness, when painful operations were performed. Since 1866 no radical change had been made in the methods of cataract extraction which found general acceptance. Something better in the treatment of cataract was at least conceivable; there might be cure without operation, or prevention altogether might be possible. Useful as was iridectomy in the treatment of glaucoma, further advances in that direction might be made in the future. He did not think irido-dialysis would ever be revived. Nearly all the surgical interferences now in use for trachoma had their prototypes in ancient times. The treatment which gave the best results in the more severe chronic cases was now often employed in cases where it came to be an unnecessary mutilation. The tendency for people to go to the optician for optical defect was a matter for regret, because the optician could not detect and treat the pathological condition which often underlay the visual defect. The President then entered into a historical survey of treatment of eye conditions, paying special attention to the Hippocratic school. Polypharmacy was largely practised by the ancients, because they did not know the values or chemical reactions of drugs. He believed the use of mydriatics had been overdone. The advantages of inducing hyperaemia had long been known empirically, but Bier had now put the matter on a scientific basis. The efficacy of ionization was very real, and though the practice was yet in its infancy, there were many possible developments in the future; and the same was true of *x* rays and radium. In trachoma it was doubtful how far those remedies would take the place of surgery. In conclusion, the speaker declared himself a firm believer in a great future for medicine, both preventive and remedial, in which treatment by serums and antibodies which counteracted and stimulated the activities of the organism, would play a great part.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

Wednesday, October 20th, 1909.

Dr. ADAM FULTON, President, in the Chair.

DR. JOHN CAMPBELL, of Belfast, in an inaugural address on *Sepsis in midwifery practice*, said that since every year more than 2,000 women died in England and Wales from puerperal sepsis, and thus accounted for three-fourths of the total mortality from puerperal conditions, the subject must incontestably appeal to every general practitioner. The mortality from sepsis in lying-in hospitals was now as low as 0·1 per cent., or even 0.048 per cent. (Rotunda Hospital, 1908), which contrasted with a general mortality for the whole country of at least 0·22 per cent. to 0.23 per cent., if not higher. Probably the true mortality was more nearly that of Manchester, which worked out at 0.56 per cent, or in its worst district as high as 1.4 per cent. The more stringent test of morbidity rather than mortality was now applied to lying-in hospitals, and the same system had been adopted successfully in their own work by some private practitioners. In 77 per cent. of a series of 465 cases reported at the Belfast Annual Meeting of the British Medical Association by Dr. John Austin the temperature never exceeded 99° F. Bacteriological investigations had shown that in a normal puerperal woman before labour the genital tract might be divided into a septic zone below and external to the position of the hymen, an aseptic but not sterile zone corresponding to the vagina, and a sterile region within the uterus itself. Digital examination and the changes of labour itself might, and frequently did, completely alter these distinctions. The author also dealt with unsuspected sources of infection about nurses, such as gumboil or varicose ulcers, and laid much stress on the value of a sharp large loop flushing curette with long handle, to be used in every case where the hand had been introduced within the uterine cavity, or where there was any possibility of placental débris remaining behind.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

Thursday, October 14th, 1909.

Dr. R. S. PEART in the Chair.

THE following were among the cases demonstrated: Dr. THOMAS BEATTIE: (1) A man, aged 54, with *Paralysis agitans*, whose case had been under observation for five years, and in whom there was the typical general posture with retropulsion, exalted knee-jerks, tremors of neck and facial muscles and of legs, but none of the usual rotatory movements of the forearms and fingers. (2) Two cases of *Specific aortitis* with fusiform dilatation of the aorta, aortic regurgitation, and anginal attacks. As alternative explanations of the latter several suggestions were put forward by him: (*a*) That they were due to the dilatation of the aorta, similar to the pain of aneurysm, and reflex through the sympathetic; (*b*) they were due to the lack of proper distension of the coronary arteries, and consequent ischaemia of the heart muscle resulting from the aortic regurgitation, and imperfect filling of the sinuses of Valsalva; (*c*) they were due to actual narrowing of the coronary arteries from specific endocarditis similar to the specific condition of the aorta. Mr. A. M. MARTIN: (1) Case of *Femoral aneurysm* in a male aged about 40, cured by extraperitoneal ligature of the external iliac artery with chromicized catgut. The cause was unknown, and it produced typical symptoms and signs, also pain radiating from the hip to the knee-joint. The sac was still present, but pulsation was absent. (2) A case of "*Joint mouse*," the foreign body being a detached piece from the internal femoral condyle. The patient, a male aged 25, came complaining of symptoms typical of a loose semilunar cartilage. Five months before the operation the toe of his right foot caught against a steel plate in a shipyard. He fell down with his leg doubled up under him, the knee was locked for some time, and complete extension was never afterwards possible. At operation a large piece of bone measuring $1\frac{3}{4} \times 1 \times \frac{1}{8}$ in. was found; it was coated with cartilage on its convex aspect, and this exfoliated shell comprised the greater part of the lower aspect of the internal condyle of the femur. The author had once before seen a similar case. Mr. H. BRUNTON ANGUS: (1) A male, aged about 45, in whom he had reduced a sciatic dislocation of the hip-joint. About three months afterwards the patient returned with a huge mass of new bone growing from the antero-lateral aspect of the upper end of the right femur. This painless tumour extended upwards into the right iliac fossa, and did not implicate the hip-joint. The overlying tissues were very oedematous, and the superficial veins dilated so that the condition simulated a bone sarcoma. He presented unmistakable signs of *Tabes dorsalis*, and the view was therefore taken that the new formation of bone was a parasyphilitic manifestation. (2) A male, aged 35, in whom fifteen months previously the exhibitor had reduced a dislocation of the shoulder. Recently he was sent to him a second time with a diagnosis of sarcoma of the upper end of the humerus, based on great swelling and oedema in that region, together with dilatation of the superficial veins and a marked degree of thickening of the upper end of the humerus. No other joints were implicated, but there was no doubt that it was a *Monarticular osteo-arthritis*, and time had confirmed this view. The patient was now developing symptoms and signs of general paralysis of the insane. Dr. HORSLEY DRUMMOND: A middle-aged man with two separate *Saccular aneurysms* of the thoracic aorta, whose only symptom was pain referred along the left eleventh dorsal segment. There were no physical signs. The diagnosis entirely depended upon the *x*-ray evidence. Mr. S. S. WHILLIS: A child operated on three weeks previously for a *Mastoid abscess* with lateral sinus thrombosis by a modification of Ballance's method, a rectangular flap of the whole posterior wall of the cartilaginous meatus being detached and turned

inwards. Dr. A. Parkin: Case of *Raynaud's disease* in a young adult female. There was a patch of gangrene on the heel, and both feet and legs were cyanosed. The radial pulse had a very small volume, and Dr. Parkin remarked that he considered this feature more than accidental. Dr. R. A. Bolam: A case of *Naevus unius lateris* in a boy, who soon after birth was noticed to have roughened areas of skin on one half of the body. There was now a definite verrucose condition of skin in patches and lines. The distribution was definitely unilateral—half of the scrotum and half of the penis, for example, being involved. Other areas extensively affected were the posterior scapular and the elbow.

Rebiews.

THE LIFE OF SIR WILLIAM BROADBENT.

The life-history of one who has climbed to the top of the professional tree by sheer force of character and determination to succeed, cannot fail to afford encouragement to those who are struggling upward, or to interest all who can appreciate well-deserved success.

Like many others who have reached the highest professional level of their day, Sir William Broadbent started on his medical career without the aid of wealth or influence, and his early struggles against lack of means and against a certain amount of professional antagonism are well described in the *Life of Sir William Broadbent*,[1] recently published by his daughter, Miss M. E. Broadbent.

Originally intended for private circulation only, the history is told to a great extent by the letters of Sir William to various members of his family and to intimate friends, supplemented by explanatory and connecting notes. From these it appears that after five years' apprenticeship in Manchester he became qualified in 1857, and, failing to obtain any resident hospital appointment, he proceeded to Paris, and there studied under the distinguished teachers of that day, being particularly attracted by the clinical methods of Trousseau. The knowledge of the language and the sympathy with the French character which he thus acquired stood him in good stead throughout his career, and doubtless contributed to his enjoyment of Continental holidays in his later years.

Obtaining the medical degree of the London University with high honours in 1858, he began his lifelong association with St. Mary's Hospital, London, as obstetric officer, a post then involving ceaseless work and heavy responsibility. His letters describing the leading men on the staff, pictured in his provincial imagination as gods, but realized in fact as "only men," illustrate the keen insight into personal characteristics which throughout his life enabled the physician to gain the confidence of the patient on other than medical grounds.

Ten years spent in hard work, hampered by a constant battle with financial difficulties, placed him on the staff of St. Mary's and on the high road to the ultimate success to which he had throughout all his struggles firmly believed that he should attain. From 1865 onwards he published many contributions to medical science, at first on obstetric subjects, and on various neurological problems. His paper on the exemption of muscles acting in pairs, from paralysis in hemiplegia, attracted general attention and "Broadbent's hypothesis" has been an important factor in neurological study up to the present day. About this time he believed that he had discovered a means of checking the progress of cancer by injections of acetic acid, but he soon recognized its limitation, and, dreading the repute of a "cancer specialist," quietly dropped it. Whilst thus advancing toward professional eminence he was not unmindful of his less successful brethren, and he became actively associated with the work of the British Medical Benevolent Fund as its honorary secretary. In later years he held the posts of treasurer and president, and to the end of his life was a warm supporter of its claims as a "first charge" upon professional charity. His example might well be followed by the very large contingent of successful men in London and the provinces who now contribute nothing to its funds.

The Franco-German war of 1870–71 attracted many of the younger men of that day, Broadbent among them; he decided not to interrupt his London career, but a visit to the principal battlefields in 1872 is graphically described in his letters. At that time, having been qualified for fourteen years, he records the fact that his income had reached £1,000 a year, and thence onwards his professional success was assured from the financial point of view. His literary and scientific work was unceasing. He edited a new edition of *Tanner's Medicine*, which was the textbook of forty years ago, and wrote many original papers on typhoid and other fevers, and on diseases of the heart. His subsequent work in the latter domain of medicine is known to all.

Much of the memoir is devoted to the record of private life and opinion as told in correspondence with intimate friends and relatives. These letters reveal a mind keenly interested in passing events, shrewdly critical of public personages, and full of human sympathy. To all who enjoyed his friendship or acquaintance they will recall a personality of singular attraction.

From 1880 to 1907 Sir William Broadbent's position as one of the leading physicians of his day brought him into contact with the leaders, from Royalty downwards, in almost every other walk of life, and he was constantly called upon to assist in furthering the advance of philanthropic schemes. Notable amongst these was the campaign against tuberculosis, in which he was keenly interested from the first, presiding over the Organizing Committee of the National Association, and leading the far-reaching crusade to the position which it at present holds.

Fearless in defence of what he believed to be right, courteous and considerate in controversy, warmly attached to a wide circle of friends, Sir William Broadbent's character is pregnant with example, and the story of his career may be studied with advantage by all who may be striving to follow in the footsteps of a great physician, and will be read with pleasure by all who knew the man.

HOSPITAL CONSTRUCTION AND EQUIPMENT.

It usually falls to the lot of one or two members of the staff of a hospital which is to be rebuilt, reconstructed, or enlarged, to be called upon to assist in prescribing the conditions which must be fulfilled by the architect, and in watching over the manner in which the conditions stated are fulfilled. Heretofore there has not been any convenient work upon the subject, most of those in existence dealing mainly with hospital construction, and being of large bulk and corresponding price. We therefore confidently predict for the book entitled *Construction, Equipment, and Management of a General Hospital*, which has been written by Dr. D. J. Mackintosh, M.V.O., Medical Superintendent of the Western Infirmary, Glasgow,[2] a large measure of success. It will save much weary searching through the files of magazines and periodicals for details by supplying the desired information in a succinct and readable form. It is yearly becoming more evident that, with regard to our modern hospitals and similar institutions, "there are details of construction of which the need, and the conditions under which the need can be met, are known only as a result of experience in administration. Hence, the architect and the practical administrator must be associated in their labour," so that the one interprets and puts into form the requirements of the other. To supply this want so long experienced will be the effect of this book. The author is careful to disclaim any suggestion of finality in design or equipment, but he offers the result of his experiences as one of the milestones on the road of progress.

The first notable feature about the volume is the thoroughness and care for detail exhibited in dealing with the various departments. There are only twelve chapters, but the method of condensing and tabulating all the necessary information, fitting it with precision into its own place, is eminently characteristic of the author. He states in no uncertain manner what he thinks desirable in construction and equipment, always with good reason

[1] *Life of Sir William Broadbent, Bart., K.C.V.O.* By M. E. Broadbent. London: J. Murray. 1909. (Demy 8vo, pp. 318. 10s. 6d.)

[2] *Construction, Equipment, and Management of a General Hospital.* By D. J. Mackintosh, M.B., M.V.O., Medical Superintendent, Western Infirmary, Glasgow. Edinburgh and Glasgow: Wm. Hodge and Co. 1909. (Roy. 8vo, pp. 165; 17 inset sheets of plans; 61 illustrations. 10s. 6d.)

for the faith that is in him, even to the minutiae of the advantage of glazed tiles for walls, the superiority of one class of wood for floors, and how there can be a great saving of taps in the arrangement of steam pans. No detail escapes notice, even to the kind of screws for pipes. The book is throughout most practical. There are over sixty excellent plates, all from photographs, of the most up-to-date fittings, furnishings, and equipment, while at the end of the book are seventeen plans illustrative of all the departments of a modern hospital. There are copies of the various forms and reports used in all departments, and the appendices give inventories of outfits, with the probable cost, for operating theatres and wards, and of the linen, crockery, cutlery, and furniture required. This must prove of great practical value to both architects and administrators.

The chapters deal in turn with the gatehouse or admission block and the importance of thorough supervision there in every detail; the medical and surgical ward units and units for special wards, such as the septic, aural, ophthalmic, gynaecological, skin, and burn wards; the nursing and domestic staff and nurses' home; the medical officers of units; the out-patient department, kitchen, laundry, and adjuncts. There is a special chapter on heating arrangements, with a description and illustration of the Reck Patent Circulator system, which the author considers the best type of heating apparatus for hospitals.

One point the author incidentally refers to, regarding which he is not in agreement with many hospital managers in the South—namely, the question of a medical superintendent. Dr. Mackintosh takes the principle of a medical administrator having full control as a *sine qua non* throughout the volume. The book itself affords abundant testimony that a medical training and a capacity for organization and management can be combined in one individual; and the same question has been thoroughly discussed by Sir Henry Burdett in the 1905 volume of *Hospitals and Charities*—to whom, by the way, the volume under review has been dedicated in token of the excellence of his work on behalf of hospitals. The volume, which is printed on paper adapted to bring out the details in the illustrations, will be a standard work on the subject, and should be in the hands of every hospital architect, manager, administrator, and member of staff. As a work of reference for the detail of hospital construction and work it is quite unique.

A FRENCH LIBRARY OF EXPERIMENTAL PSYCHOLOGY.

Under the editorship of Dr. Raymond Meunier a series of monographs[3] dealing with psychology and psychological medicine has been begun. The collection of volumes already issued or planned, falls into three groups. One will be historical, that is, will deal with special branches of study which have existed for a long time but which are genetically related to and have still certain ties with contemporaneous psychological medicine. The second group will deal with psychological problems of a general order discussed in the light of modern scientific methodology; whilst in the third special problems in normal, pathological, and ethnological psychology will be treated. Of this long series several volumes have been published. The first, on telepathic hallucination (*Les hallucinations télépathiques*), by Dr. N. Vaschide, and the second, on spiritism in relation to insanity (*Le spiritisme dans ses rapports avec la folie*), by Marcel Viollet, have not been received by us, and the third, on morbid audition (*L'Audition morbide*) by Dr. A. Marie, physician-in chief to the Villejuif Asylum at Paris, may be dismissed in a few words. The book is composed of two chapters, the first dealing with insufficient audition or hypoacousie, and the second with its apparent opposite, hyperacousie. The first chapter is confined in the main to audition in the mentally defective, and the second to the curious phenomenon of "coloured hearing." Both chapters are principally composed of excerpts from and analyses of the writings of others, more or less ably strung together. At the end there is an imposing bibliography which may be of use to some.

In the fourth volume, *Les préjugés sur la folie*, Princess Lubomirska, a former pupil of Dr. Marie, endeavours in five chapters to dispel the prejudices and misconceptions which still cloud the public view of insanity and insane people. One of the public herself, Princess Lubomirska writes in light and popular fashion. The five chapters deal with the supposed supernatural origin of madness; the exterior aspect of the insane; the contagiousness of insanity; its incurability; and the dangerousness of insane people. The authoress appears to have been well instructed. She has written an agreeable essay for popular consumption, and has visited at least one asylum. This, instead of the inferno which she expected, she found to be a palace set in beautiful gardens, in which, from her account, wandered the most refined, gentle, and courteous of people. But, if we may quote from one of her own frequent exclamations, "Et la réalité! Ah! la réalité!"

Passing by the next two volumes, *La pathologie de l'attention* and *Les synesthésies*, by Drs. Vaschide and Meunier and Dr. Laures respectively—the first of which is obviously of the written-to-order kind, and the second mainly a disquisition on coloured hearing—we come to volume seven, *Le hachisch*, by Dr. Meunier. This is a really excellent monograph replete with information. The author opens with an exceedingly interesting historical account of the different methods of hashish intoxication, and closes with a valuable and extensive bibliography. In the six intervening chapters he gives good accounts of hashish intoxication; of the results of modern experimental investigation into its composition and physiological effects; of hashish insanity so far as has been described, and of the drug's therapeutic properties. The preparations of cannabis indica—the term "hashish" being derived simply from an Arabic word meaning dry herb—are numerous, and under many differing names in different Eastern countries, some part of the plant is smoked in pipes, burnt as a pastille, chewed as an electuary, or imbibed as an intoxicating liquor. Over sixty years ago Moreau of Tours wrote his work, for long the most complete on this subject, on *Haschisch et de l'aliénation mentale*. In this curious but profoundly suggestive book Moreau showed that the primordial effect of hashish intoxication was "excitation with dissociation of the ideas through enfeeblement of the attention." This primordial effect, he maintained, was also to be found in all physiological conditions—toxic or autotoxic—favouring the development of hallucinations. Further, the most complete expression of this condition was to be found in dream states, where the subject pursues a detached interior life in which imagination, freed from superior control, reigns supreme, and *la folle du logis* becomes the mistress. For Moreau, therefore, insanity was only a pathological form of dreaming, improperly encroaching upon the waking life. The present interest of this view is that it was through an exposition of the facts of hashish intoxication, by which an ephemeral insanity could be artificially induced and objectively studied, that Moreau endeavoured to establish his thesis. In the present work Dr. Meunier pays tribute to the value of Moreau's work, but closely criticizes his theory of the identity of dream states and insanity, finding it inadequate and misleading. This discussion, and the succeeding account of the therapeutic possibilities of cannabis indica, we may commend to the reader, only extracting here one interesting matter relating to the effect of hashish upon the mentally disordered. Dr. Meunier has found that in hysterics hashish intoxication gives rise to a crisis of excitement, and in certain cases to a period of acute delirium, the emotional colour of the delirium being determined by, or rather an accentuation of, the latent or subconscious affective tone of the subject. He therefore suggests that in the examination of an insane person hashish is likely to prove a valuable auxiliary by revealing the subconscious emotivity of the subject. As a hypnotic Dr. Marie and Dr. Meunier have found cannabis indica to be unsatisfactory. On the other hand, like Dubois of Berne, they have found that it greatly

[3] *Bibliothèque de psychologie expérimentale et de métapsychie.* Directeur: R. Meunier. Paris: Bloud et Cie. 1908-9. (Cr. 8vo. Fr. 5 each. Nos. 9 and 10. Fr. 1.50 each):
No. 3. *L'Audition morbide.* By Dr. A. Marie. (Pp. 152.)
No. 4. *Les préjugés sur la folie.* By Princess Lubomirska. (P. 106)
No. 5. *La pathologie de l'attention.* By Drs. N. Vaschide and R. Meunier. (P. 118.)
No. 6. *Les synesthésies.* By Dr. Henry Laures. (Pp. 100.)
Nos. 7 and 8. *Le hachisch.* By Dr. Raymond Meunier. (Pp. 219; pl. 3.)
No. 9. *L'Evolution psychique de l'enfant.* By Dr. H. Bouquet. (Pp. 105.)
No. 10. *Travail et folie.* By Drs. A. Marie and R. Martial. (Pp. 110.)

heightens suggestibility, so that they have been able with its aid to treat patients by suggestion who were absolutely rebellious to both hypnosis and suggestion in a waking state.

The ninth volume of the series deals with the mental evolution of the infant, and the author, Dr. H. Bouquet expressly confines his exposition to the first three or four years of child life. The study of the child, Dr. Bouquet says, falls into two great divisions: one exogenous—that introduced into the mind of the child by education and instruction, and the other endogenous—personal to the child himself. The author in this treatise considers only the latter. He describes the reflex and instinctive reactions of the child immediately after birth; the development of the five principal senses; the first essays at walking and talking; and, under the head of infantile psychology, habit, memory, pleasure and pain, fear, imitation, imagination, infantile fetishism, and moral evolution. Few subjects could be more instructive or exert a greater fascination. It is evident, however, that the difficulty is in direct proportion to the interest. During the greater part of these years, from the moment when the child emerges from his mother's womb, blind, deaf, and pathetically feeble, the most impotent new-born thing on earth, to the time when he develops speech, power, and purpose, and thus ceases to be an infant, the study of his evolution must be objective, with no possibility of that introspection on which adult psychology was originally based. Hence, to be of any value, a book on this subject should be founded on careful systematic observations, accurately tabulated, and compared with the work of others; and, further, constant caution should be exercised in drawing psychological inferences from objective facts. On all of these counts Dr. Bouquet's book fails. Since Darwin, who was apparently the first to make a scientific study of child-life, wrote on this matter a considerable literature has accumulated, and this the author appears to have skimmed; but of observed facts few appear in the book, and these are but vaguely expressed, though deductions from them are stated with considerable boldness. Otherwise the book, even though it contains nothing new, is interesting enough and is pleasantly written.

The *Travail et folie* of Drs. A. Marie and R. Martial is the tenth volume of this series. The authors try to determine, first, what part an insane person's occupation has played in the *ensemble* of etiological factors; and, secondly, the relative insanity rates of the separate trades or professions represented in the Villejuif Asylum as compared with the numerical strengths of these trades or professions in the general population. For these purposes they have used the registers of the Villejuif Asylum since 1884 in respect of the male patients, altogether 9,503 in number. These they have compared with the official returns for Paris in the census of 1891. Obviously, therefore, the authors' deductions from these statistics have no value as showing the actual insanity rates of the separate groups of workers. On the other hand, their analysis is valuable as indicating the relative incidence of insanity in the separate groups as compared with each other. The results obtained are compressed into the last thirty pages of the book, the bulk of the work being taken up with a historical critique, sociological considerations, and a general survey of the causes of insanity so far as these are favoured by particular employments. For want of complete information in the official returns, and because of the inherent difficulties concerned with the classification according to their work of the patients themselves, the authors do not claim for their work any general value, but only set it forth as a tentative effort and as the only comparative study dealing from this point of view with large numbers of patients in France. In their statistical tables they classify the patients into fourteen groups: Workers on the land; quarrymen; workers in stone, lime, and sand; metal workers; workers in wood; workers in cloth; workers with animals (butchers, tanners, etc.); with vegetables and grain; with chemical products; lead-workers of all kinds; workers concerned with transport (sailors, coachmen, post-office and railway employees, etc.); caterers of various kinds; those in sedentary and commercial employments; and, lastly, the members of the liberal professions. In the tables the proportions of these classes to the same classes in the general population of the Seine Department are given, both as regards the total incidence of insanity and also according to whether the mental condition was one of congenital defect; hereditarily predisposed mental disease; mental enfeeblement (dementia); a functional psychosis; tabo-paralysis, or of alcoholic origin. The results are too numerous to quote here, but to those interested this little book will prove of considerable documentary value.

ANATOMY.

The eighth edition of Gegenbaur's textbook of human anatomy[4] is the first edition which has appeared since his death in 1903. It is edited by Professor M. Fürbringer, who is now Professor of Anatomy in Heidelberg, and it is entirely of the character Gegenbaur himself would have admired, for it displays broad and precise knowledge expressed in lucid and impressive words. In conformity with its title the book deals with the anatomy of man. Yet the editor has not limited himself within the boundaries of anthropotomy, but has boldly overstepped them whenever it has been necessary for the explanation of conditions and phenomena met with in the human subject, and he frequently presses into his service general zoological and embryological knowledge. The book is to be enlarged considerably beyond its previous dimensions, and is to appear in three parts, of which the first, that now under consideration, is the full size of an ordinary textbook, nevertheless it is practically only an introduction to anatomy. Its contents include a history of the subject, a general glance at the anatomy and physiology of cells, general development, an outline sketch of the tissues, ending with a consideration of the body as a whole and the relative proportions of its organs and systems. It contains an excellent summary of present-day knowledge regarding the subjects touched upon; it is well printed; sufficiently, though not elaborately, illustrated; but, like so many Continental textbooks, it is not well bound.

Professor Bourne's *Introduction to the Study of the Comparative Anatomy of Animals*[5] is intended to meet the requirements of the elementary examinations at the leading universities of Great Britain. Nine years have passed since the volume first appeared, and the great advances made in the interval have necessitated the production of a second, revised and partly rewritten, edition. The excellent plan adopted in the first edition is retained, the student being introduced to the general plan of animal organization as it is displayed in the frog in such a way that he must gain, in a simple but complete manner, a very definite knowledge of the organization and structure of the vertebrate animal. Afterwards the ordinary phenomena of cell division, the maturation of the germ cells, and fertilization, as they are understood to-day, are clearly and concisely explained. The remainder of the book deals with the anatomy and life-history of protozoa and coelenterata, and it includes a valuable chapter on malaria and the life-history of the malarial parasite. The volume should be in the hands of every student of medicine, for both in plan and execution it is admirable, and it is equally interesting and instructive.

NOTES ON BOOKS.

The pathological collection in the museum of the ancient City hospital, St. Bartholomew's, is of such an extent as to be practically complete. A long series is apt to confuse the student, and Dr. Herbert Williamson and Dr. R. Jamison have therefore done well to prepare a *Guide*.[6] They followed the good example of Mr. Walsham, who compiled a pathological manual for the use of students in the same museum, excluding, however, gynaecological specimens. The authors understand the uses and limitations of the museum as an agent in instruction. The shelves should not be consecrated mainly to "rare and interesting" specimens, only of value to the student when, after

[4] *Gegenbaur's Lehrbuch der Anatomie des Menschen.* Achte Auflage Von M. Fürbringer. Erste Band. Leipzig: Wilhelm Engelmann. 1909. (Sup. roy. 8vo, pp. 710, figs. 276. Mk.18.)

[5] *An Introduction to the Study of the Comparative Anatomy of Animals.* By G. C. Bourne, M.A., D.Sc., etc. Vol. i. Second edition. London: George Bell and Sons. 1909. (Cr. 8vo, pp. 315, 59 figs. 6s.)

[6] *A Guide to the Study of the Specimens in the Sections of Obstetrics and Gynaecology in the Museum of St. Bartholomew's Hospital.* By Herbert Williamson, M.A., M.B., M.R.C.P., Assistant Physician-Accoucheur, and Reginald Jamison, M.A., M.B., F.R.C.S., Junior Demonstrator of Pathology. London: Adlard and Son. 1909. (Cr. 8vo, pp. 298. 5s.)

qualification and experience, he is competent to judge their significance; nor should they be crowded with duplicate and triplicate samples of the same condition. The specimens for the benefit of students in a medical school should show as clearly as possible what they are intended to demonstrate, and the catalogue should make clear all points that the learner may fail to appreciate when with untutored eyes he inspects a preparation. The specimens should be chosen so as to illustrate the more definite types of morbid conditions to which each organ and tissue is subject. The choice, in the instance in point, has been judicious, and the *Guide* will certainly be of high service to the student. Abstract clinical histories and references to reports, where the specimens have been exhibited before societies, names of donors, and other details with which the student has no immediate concern are judiciously omitted, so that the *Guide* is as portable as it is lucid. In conclusion, the post-graduate may study it, in the museum, *bien entendu*, with great profit, for it is only by keeping in mind the true meaning of a collection as an instructive agent that he can aid in making it likewise an instrument for scientific progress by setting forth the true value of a rarity and indicating paths towards the unknown.

Dr. BOYSEN'S pamphlet on the structure and pathogenesis of gall stones is a translation into German of a work he published in Danish no less than nine years ago.[7] It says a great deal for the quality of the contents that Professor Rovsing, of Copenhagen, can write a preface to this edition in practically the same terms he would have employed at the earlier date. There is, however, this difference, that whereas he would have described Naunyn's theory of the bacterial origin of gall stones as improbable, he now regards it as untenable. Boysen's researches certainly go to show that bacteria are not responsible for the actual inception of biliary calculi, and that the inflammatory changes they initiate in the gall bladder are only one, and perhaps not the most frequent, of the many causes that determine the deposition and infiltration of cholesterine. A study of the structure and "growth" of gall stones has led the author to the opinion that in the first place pigment concrements are swept into the bladder by the bile stream, and that pigmentary masses are for the most part the nuclei of cholesterine stones. That a "desquamative catarrh" may occur apart from the influence of micro-organisms is a tenable opinion, and that conditions may obtain in which the cholesterine content of the bile is abnormal, or in which cholesterine may be precipitated or "extracted" from normal solution in bile, is probably provable; moreover, it is well known that pigment stones are formed in the liver, but the present thesis cannot be regarded as more than contributory evidence in favour of Rovsing's view that bacteria play an unimportant part in gall-stone formation.

[7] *Ueber die Struktur und die Pathogenese der Gallensteine.* Von Dr. med. J. Boysen. Berlin: S. Karger. 1909. (Roy. 8vo, pp. 133. Taf. II. M.4.)

MEDICINAL AND DIETETIC ARTICLES.

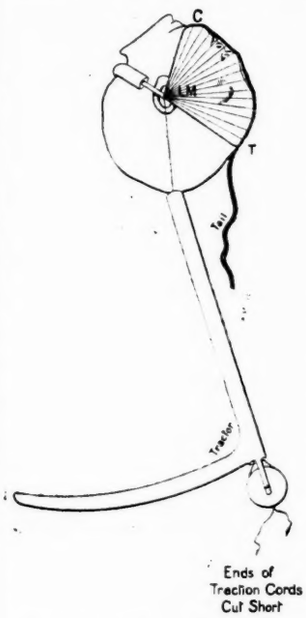
Guipsine, the Active Substance of Mistletoe.

IT has sometimes happened that substances which were in use as drugs in ancient times and have dropped out of use have proved, when subjected to investigation, to have merited part, at least, of their former reputation. This appears to be the case with mistletoe, to which great medicinal virtues were ascribed by the ancients. It gradually ceased to be employed, however, and this is now said to have been due to the dried plant having come into use instead of the fresh. Recent researches, chiefly by Leprince and Chevalier, have shown that fresh mistletoe contains a volatile alkaloid, two saponins, and emetic and cathartic resin. M. Leprince is now manufacturing a substance to which he has given the name of "guipsine," which is said to contain the alkaloid and the glucosidic saponins, without the resin or inert matter. The principal pharmacological effect of this drug is a lowering of arterial tension, and this is said to be due to a central vasomotor action, and to be without any depressing action on the heart itself. The preparation is supplied in the form of pills, each containing 5 cg. (London agent, Mr. A. Boisselier, 13 and 14, Trinity Square, London, E.C.), a sample of which has been submitted for our examination. Guipsine is recommended for use in arterio-sclerosis, and other conditions where hypertension has to be combated. The pills are small and coated, and disintegrate easily; it is a little against their use in this country that each has the word "guipsine" printed on the coating.

MEDICAL AND SURGICAL APPLIANCES.

An Obstetric Tackle.

LIEUTENANT-COLONEL HUGH L. DONOVAN, M.D., A.M.S. (R.P.), writes: I have invented a tackle for applying traction to the child's head to assist delivery. It is easily made. A "mask" is shaped out of a piece of silk on a model of a fetal head to cover the face and to lap over the lower jaw, but not compress the neck, and to extend over the forehead. It is gathered in at the front of the mastoid process at each side. The accompanying illustration will serve to make the description clearer. "C" is a point on the margin of the "mask" nearest the centre of the chin, "R M" is a point on the margin at the right mastoid process, "L M" is a point on the margin at the left mastoid, "T" is opposite "C" and midway between "R M" and "L M." A "pocket" is made between "C" and "T" by sewing on a piece of tape about an inch wide closed at "C" and open at "T," and from "T" the tape is continued in a long free "tail." A "traction cord" is fastened at "R M," and another at "L M," and a hole is worked in each close to its origin, the cords are of equal length. The "director" is a long strip of celluloid to insert into pocket, and project a long distance out of it. The "tractor" consists of a metal tube, handle, and pulley. The tube is to extend from the child's head to outside the vagina, the handle and pulley are attached to the outside end of the tube. The handle is a segment of a circle whose radius is the tube. The "pulley" is a small wheel grooved round its circumference to carry the traction cords. A line down the centre of the bore of the tube if continued would pass through diameter of the pulley. Both mouths of the tube are smoothly bevelled. The "traction cords" pass through the tube and round the wheel to which they are fastened. The "loop" is composed of a long narrow rubber tube enclosing thin narrow steel bands, it is for slipping as a loop over the occiput, and in the concavity of the bend a short tube is stitched on; these stitches can be pulled out and the tubes released from each other by pulling two cords which hang out of the ends of the long tube. The long tube is perforated opposite each end of the short tube, so that when lubricant is pumped into the long tube it escapes through these holes and lubricates the traction cords, etc. The "traction cords" run through the short tube from opposite directions, then each passes through the hole in its fellow. To apply the "tackle" the "loop" carrying the short tube and "traction cords" is passed over the occiput, its ends hang out of the vagina, the "traction cords" are adjusted at each side of the head. The "director" is run into the "pocket," the "mask" is pushed in and on towards the chin, "C" leading. As the "mask" moves on a gentle pull is kept on the "traction cords," and their ends are kept exactly together. The inner end of the "tractor" is kept over the sagittal suture, but not so close as to interfere with the "director." Then "C" goes over the chin and "R M" and "L M" to their mastoid processes. When "C" has gone over the chin, on drawing back "director" a little and pulling "tail," the "mask" will be found to be held. Then remove the "director," tighten up and fasten the "traction cords," remove the "loop," and pull on the handle. Keep up a gentle traction on the "tail" to prevent the "mask" from rucking up.



Obstetric tackle applied. "Loop" and "director" having been removed.

IT is announced that the Liverpool School of Tropical Medicine is about to establish at Grand Canary a station for the treatment of sick persons from the West African Coast.

THE SIXTEENTH INTERNATIONAL CONGRESS OF MEDICINE.

BUDAPEST, AUGUST 29TH TO SEPTEMBER 4TH.

(*Concluded from page 1234.*)

Section of Rhinology and Laryngology.

Cancer of the Larynx.

The chief attraction in this Section was the discussion on laryngeal cancer, which was opened by Sir Felix Semon. He said the early diagnosis was usually not difficult, but he cited a number of cases which illustrated some of the difficulties which may arise. The cases included malignant disease of the larynx, which manifested itself at first in the form of a tumefaction of the vocal cord, and remained stationary for nearly two years before the true nature of the disease could be determined; epithelioma of the left ventricle of Morgagni simulating a papilloma; epithelioma manifesting itself as an angioma; epithelioma appearing as a white, sharply-pointed elevation of the cord; chronic inflammatory disease, laryngeal tuberculosis, leucoma, papilloma, granuloma, etc., all simulating malignant disease. Chiari (Vienna) discussed the treatment of laryngeal carcinoma. Intralaryngeal removal was seldom possible, and even when successful recurrence was frequent. Thyrectomy was applicable for small growths of the cords and fold, and usually yielded 50 per cent. of cures. The results were satisfactory as regards function. Subhyoid pharyngotomy was rarely used, but had become less dangerous than formerly. Gluck's method of performing total laryngectomy was in his opinion the best. He also dealt with the results of *x*-ray, radium, cautery, and fulguration treatment. In conclusion he uttered a note of warning against placing too much trust on statistics in favour of any special form of treatment. Gluck (Berlin) dealt chiefly with the results of laryngectomy. Massei (Naples) dealt with some cases of syphilis of the larynx and fauces, which became undoubtedly malignant at a later stage.

Experimental Phonesis.

Zwaardemaker (Utrecht) and Boumann (Amsterdam) spoke of experimental phonesis from the medical point of view. They based their communication on the assumption that speech was a phonetic mimicry, and then proceeded to analyse speech according to the carrying power of the voice, the quality of the speaking voice, articulation phonesis, the movements of the jaw and lips, and, lastly, acoustic phonesis. These considerations led to the construction of a registering apparatus, by means of which the movements of jaw, mouth, and lips could be determined in the various disturbances of speech. The authors pleaded for a universal phonetic alphabet, and also for the universal application of objective records of voice changes. The demonstration of the apparatus was much appreciated.

Section of Otology.

This Section, as has previously been stated, served at the same time as the Eighth Congress of Otology. It is proposed to give a short account of the proceedings of this congress in a later issue.

Section of Hygiene and Immunity.

Milk Supplies.

In the discussion on foodstuffs, Wiley (Washington) repeated much of what he said at the International Congress of Applied Chemistry in London in the summer. Balló (Budapest) pointed out the difficulties obtaining in the control of milk supplies in large towns owing to the variations in the valuable constituents of undiluted milk. The only way of preventing the adulteration of milk with water would be to have a constant control of the milk supply issuing from the dairies and milkshops—a procedure which would cost an enormous amount of money. He therefore suggested that a minimum of cream and other content of milk should be fixed on the basis of the average of a large number of examinations, and all milks showing less than this minimum should be refused as pure milk.

Ozone Purification of Water.

Fowler (Manchester) read a paper on the sanitary uses of ozone. In regard to water, he said purification was needed to rid water of organic matter in solution and suspension, of colour, smell, and taste; of organisms, and of metallic impurities. He recommended ozone treatment of water where adequate sand filters were too costly to erect or too difficult to supervise; where the amount of organic matter in the water was limited; where the pollution was mainly bacterial and of an intermittent character; and where electrical power could be obtained at a small cost.

Grassberger (Vienna), who dealt with the hygienic aspects of the water supply, distinguished between water for house use, including drinking water and water for domestic purposes, water for general purposes, and finally water for commercial purposes. The first should be guaranteed as pure as far as substances which could damage health were concerned—for example, bacteria. While water for general purposes should be free from dangerous constituents, special precautions were required with regard to water used in baths, etc. The author considered that a control by experts should be exercised not only with regard to the first, but also with regard to the second category, and that this control should be constant in large towns.

The Alcohol Question.

Laitenen (Helsingfors) considered it doubtful whether alcohol could any longer be regarded as a food. He pointed out that it could be shown by recent researches that alcohol diminished resistance, favoured degeneration, and exercised a baneful influence on the next generation. He was of opinion that the relation between the consumption of alcoholic drinks and criminality deserved to be considered by the Legislature in a most careful manner. It was, he stated, the duty of medical practitioners to give this question much more consideration than they had given it in the past, and to convince themselves by minute study of the question whether alcohol (alcoholic drinks) was not a serious poison for the organism, and whether it was not the most frequent cause of degeneration of the human race. If they agreed that this was so, they must realize that it must either be banned from medical practice and from hospitals altogether, or at all events used with the same care as other poisonous substances were used.

Malaria in Austria.

Celebrini (Triest) spoke of the measures adopted on the Austrian coast to stamp out malaria. The wholesale destruction of *Anopheles* proved difficult and expensive, as did the protection against these mosquitos. The only method remaining was, therefore, to protect the population against the pathological effects of the plasmodium. This was carried out by means of the prophylactic administration of quinine. Adults received 0.4 gram of quinine daily for five months, which effectually prevented an infection or an attack of malaria in an already infected person. But the cure was only apparent, and it was found necessary to repeat the course after a time in those who had already had ague. For children, he found that the tannate of quinine or aristochin made up in chocolate bonbons were suitable. During a period of six years 21,270 persons had been systematically treated in this way, and the result had been most satisfactory. In many districts the disease had been completely exterminated.

Section of Medical Jurisprudence.

There was little of general interest in the proceedings of this Section. Mention should be made of a paper by Goadby on the pathology of lead poisoning. The chief points elicited have already been dealt with in the British Medical Journal, in the report of the proceedings of the International Congress of Applied Chemistry, 1909.

Section of Military and Naval Sanitary Services.

Recognition of the Wounded in the Field.

Macpherson (London) pleaded for uniformity of the colours of the tallies which indicated the extent of the wound of a soldier left on the field. The fact that the same colour was used by one country to indicate a slight wound as was used by another to indicate a severe one

presented obvious dangers. At present only Portugal and the United States of America employed exactly similar tallies. He wished that the official delegates would come to some agreement regarding the adoption of a uniform diagnosis tally.

THÖLE (Hanover) reported on the frequency of abdominal wounds in the Prussian army, and their treatment during the past ten years. He considered that it would be necessary to perform laparotomy before definite signs of damage to the intestines had been made out, if the mortality was to be reduced. When the shock following a wound did not cease within three hours, and if local pain, vomiting, and contraction of the abdominal muscles persisted for this period, he advised an exploratory operation.

WALDMANN (Munich) spoke of food poisoning in the army, and pointed out that, although the occurrence of mass poisoning was less frequent in the army than among the civil population, the frequency was such as called urgently for a better control of all foodstuffs. He discussed the causes of the poisoning and the nature of the occurrences in some detail.

SECTION OF MARITIME AND TROPICAL MEDICINE.

Dysentery.

GALLI-VALERIO (Lausanne) read a paper on the etiology of bacillary dysentery. He expressed the opinion that bacterial dysentery was by no means limited to infection by Shiga's bacillus, but often depended on varieties of that bacterium and also of the colon bacillus. He objected to the term "para- and pseudo-dysentery" for forms caused by organisms other than the Shiga bacillus, as these other forms were quite as serious as the true dysentery, and the terms would imply that the same prophylactic measures need not be employed. He considered it essential that dysentery should be added to the list of notifiable diseases in every country, including European countries. He added some accounts of the prophylactic measures and of the importance of good hygienic conditions in the extermination of the disease. Laveran supported the suggestion that dysentery should be included among notifiable diseases, and a resolution to that effect was passed by the Section.

A. RUFFER and WILLMORE (Alexandria) dealt with the epidemics which occurred annually during the Mussulman pilgrimages. After describing the extent of these dysentery epidemics, they stated that their nature was mixed, inasmuch as they were both amoebic and bacillary. In regard to the bacteriology of the latter, they were of opinion that the majority of the cases were caused by micro-organisms other than the Shiga bacillus. They dealt with the infections due to the Flexner type of bacillus and to the so-called pseudo-dysentery bacillus of Kruse (two forms), and with the Tor bacillus. They considered that the serum treatment in the pure Shiga cases had yielded excellent results, but the results were uniformly negative in the Tor and pseudo cases.

Yellow Fever in Cuba.

AGRAMONTE (Havana) discussed the prophylactic measures adopted in the island of Cuba with respect to yellow fever. He related how yellow fever had practically disappeared in 1901, and said that the establishment of the Republic in 1902 and the increase of immigration had made way for an importation of an epidemic from New Orleans in 1905. The means adopted to check this disease included the isolation of the patients stricken with the disease, the exclusion of the mosquito, the special sanitary control over the entire population, the removal of breeding places of the *Stegomyia*, the pouring of petroleum into pools, the provision of metal gauze to protect water tanks and barrels, the employment of live fish to destroy the larvae of the mosquitos, and fumigation to kill off developed mosquitos. The result had been entirely satisfactory, and yellow fever had been stamped out.

Treatment of Trypanosomiasis.

KOPKE (Lisbon) read a communication on the treatment of human trypanosomiasis. He had continued his studies of the effect of atoxyl on the disease, and had found that in cases where the trypanosomes had not yet entered into the subarachnoid space, the drug was capable of curing. In those cases in which the cerebro-spinal fluid had become infected, death supervened, in spite of treatment, in a period varying up to one year. He regarded this distinction of the class of case of importance for therapeutic purposes.

CONGRESS LITERATURE.

The Hungarian Minister of Education presented to each member of the Congress a well got-up volume containing over 300 pages of letterpress and a very large number of excellent illustrations descriptive of the Faculty of Medicine in the Royal Universities of Budapest and Kolozsvár, and the buildings connected with these universities. The book is written in French, and the task of compiling the work was placed in the capable hands of Professor Dr. Emile von Gróss. The Ministry of the Interior presented the members with two small volumes dealing with matters of the public assistance, including hospital life, in Hungary, and public hygiene respectively. The former was compiled by Dr. von Kerekes, the latter by Dr. von Fáy. Both little volumes are full of interesting matter. The City of Budapest gave the members a beautifully got-up book of Budapest views; while the Congress Committee presented a small medical guide to Budapest, excellently edited and compiled by Dr. T. von Györy. In dealing with matters of a socio-hygienic nature, the author or authors showed great good judgement, and scarcely painted the conditions better than they are. This book was issued in French, German, and also in English.

The daily journals, which were edited by Professor von Tordáy, were voluminous documents, with one or more supplements. The letterpress was produced in Hungarian, German, French, and English. The journals gave sufficient information to enable members to participate in everything which might interest them.

CONGRESS BADGE.

Each member was presented with a badge surmounted with a ribbon, the colour of which served to distinguish ordinary members from Government and official delegates and members of the various committees. The badge itself was a bronze heavy medal bearing the figure of Æsculapius on the front face, and a view of Budapest on the reverse.

CONGRESS ALBUM.

A highly amusing set of circulars was addressed to each member, inviting him or her to send a photograph and biography to be reproduced in the "Congress Album." This circular was signed by the "Redaktion to the Album of the XVI International Medical Congress." Some notion of the English of these circulars may be gathered from the following extracts:

> We take the liberty to apply again, considering that the luxurious Album of the XVI International Medical Congress which we are publishing with the high autorization of the Executiv Committee is near to be ended.
>
> As until now we are not yet in possession of your photography and biography, we take the liberty tu sollicit again your kind reliance in begging you to send us the soonest possible your photography, biography and eventually an abstract of the paper which you intend presenting to the Congress.

Apart from the literary style of these productions, notice must be taken of the fact that quite a large number of members either fell into the trap of sending their photographs, etc., under the impression that this was the proper thing to do, or else seized the opportunity of advertising themselves and their faces by deliberately appearing before the public as "the most celebrated representants of the medical science." Even some British names are on the list.

LADIES' COMMITTEE.

The report of this Congress would not be complete were no reference made to the Ladies' Committee. Inasmuch as there were some 900 members of the fair sex who were not interested in the purely scientific proceedings of the Congress, special arrangements had to be made to entertain them during the afternoons and at times also during the mornings. At the head of this committee, Frau von Bokáy, the wife of a professor of diseases of children, was indefatigable and always charming. Various excursions to places of interest in and around Budapest were arranged

and carried out to the entire satisfaction of every one taking part. The working of this committee was essentially smooth, and great credit must be accorded to all its members.

Excursions.

Apart from the longer excursions to Pystien, Constantinople, and other places, invitations to view a number of scientific institutions and commercial buildings were issued. The visits to the waterworks, to the slaughter-house, to some champagne works, to the Apenta water springs *inter alia*, were full of interest to a large number. All the university clinics, medical institutes, and hospitals threw their doors open to any member of the Congress who might wish to inspect these places. The new university clinics attracted large numbers of congressists and were greatly admired.

Our Hungarian brethren deserve the warmest thanks of their guests for their kindly hospitality and for the excellent manner in which they performed the difficult duty of catering, and catering successfully, for the tastes of over 5,000 members. Budapest has left a very favourable impression on the minds of those who visited the beautiful town on the occasion of the Sixteenth International Medical Congress.

LONDON SCHOOL OF TROPICAL MEDICINE.

The London School of Tropical Medicine has lately been enlarged. The accommodation in the general laboratory has been increased by the plan, ingenious in its very simplicity, of adding to it a verandah covered with glass. It can now seat fifty-six students. Another valuable and interesting feature is a small museum, with workrooms attached, for the study of the venomous snakes and biting flies peculiar to each tropical dependency. The work of the school has developed so largely that the necessity for a considerable extension has become urgent. For this purpose it is hoped to secure a piece of land from the Port of London Authority on which to build new laboratories. Lord Sheffield has recently provided an endowment of £1,200, which is to be used this year in the investigation of diphtheria in the island of Fiji. Dr. Bahr is about to proceed there for the purpose.

Opening of the Session.

Tuesday, October 26th, was a field day at the school. The winter sesion was formally opened with an address by Professor Osler. His Excellency, Mr. Whitelaw Reid, the American Ambassador, was in the chair, and among those present were Lord Sheffield, Sir Patrick Manson, Professor Ronald Ross, Mr. E. W. Blessig, Professor W. J. Simpson, Professor R. T. Hewlett, the Director-General of the Royal Navy Medical Service, Professor Minchin, Sir Francis Lovell, C.M.G., and many others.

The Nation and the Colonies.

Taking the Nation and the Colonies for his subject, Professor Osler said three outstanding events had loosened, as a spring, the pent-up energies of the modern world—Greek civilization, the geographical renaissance of the sixteenth century, and the scientific awakening of the nineteenth century. With regard to the latter, it had given men such a control of Nature that at a stroke it removed the chief obstacle to the world-wide settlement of the white man. It was no light burden to the white men to administer this vast trust, much of which fell upon the English nation, but the responsibility of the Empire had been the making of the race. There were two problems of the first rank in dealing with subject nations—order and health. The former might be said to be a speciality of the Anglo-Saxon. Scarlet sins might be laid at his door, but the little word "order" which had everywhere followed the flag compensated for those sins. Perhaps the one feature above all others which would attract the attention of the historian of the nineteenth century would be the introduction of modern sanitation. The movement arose from the recognition of the true nature of infectious diseases. This country had carried into effect sanitary laws which had steadily diminished the mortality from these diseases. The cholera epidemic in the Fifties did a great deal to arouse public opinion and to put practical sanitation on a scientific basis. It was realized that the battle had to be fought against a living contagion, and the germs of a large number of epidemic diseases had been discovered. A sanitary organization was being perfected which gave confidence to the public and prevented commercial panics. The home defences were in a fairly satisfactory condition, but there remained to be won complete mastery over typhoid fever, the progressive decline in the mortality from tuberculosis, the reduction of still very fatal diseases of childhood, and the fact that they had not even yet arranged a truce with their very progressive foe, cancer. But when they took a glance at the Empire at large, there was a totally different state of affairs. Out of the total population, some 60 millions, perhaps, lived under good and constantly improving sanitary conditions, but of the vast dependencies with their teeming millions there was a very different story to be told. Men had learnt to recognize the importance of good health and the possibility of mitigating the conditions which led to the prevalence of epidemics. Of tropical diseases of the first importance might be mentioned malaria, plague, cholera, yellow fever, dysentery, beri-beri, and relapsing fever, with certain parasitic disorders, such as ankylostomiasis. They varied in their prevalence in different localities, but together formed the great enemies met with in the tropics. Of all but one they knew the germs, the conditions of their growth, and, in nearly all, the mode of propagation. This work had been quietly but surely accomplished by a group of patient investigators, many of whom had sacrificed health and life in their endeavours. Yellow fever illustrated the importance of effective organization. A singularly happy combination of circumstances had demonstrated on a large scale the efficiency of modern sanitary measures in one of the world's great death traps. In a general way the story of the Panama Canal was well known. For twenty-three weary years the French company struggled against financial difficulties at home and insuperable sanitary obstacles on the isthmus itself. Little did the nineteen Frenchmen who reached Panama in January, 1881, think the secret of success lay 6,000 miles away, with an army surgeon who was investigating malaria in a military hospital in Algiers, called Laveran. From 1890 yellow fever practically disappeared, with the exception of a small epidemic in 1897. In 1904 the United States undertook to complete the canal, and its success or failure was largely a matter of sanitary control. The whole profession in the United States felt certain that if Dr. Gorgas could be given full control of the sanitary affairs of the Panama zone the health problem, which meant the canal problem, would be solved. Yellow fever occurred on the isthmus in 1904 and the early part of 1905. There had been a great many brilliant illustrations of the practical application of science in preserving the health of a community and in saving life, but the past history, and the extraordinary difficulties to be overcome, showed the work accomplished by the Isthmian Canal Commission to be unique. Having given statistics as to the decrease of mortality from different diseases, Professor Osler said a remarkable result had been that in 1908 the combined tropical diseases, malaria, dysentery, and beri-beri, killed fewer than the two great killing diseases of the temperate zone, pneumonia and tuberculosis. The whole story was expressed in two words "effective organization," and the special value of this experiment in sanitation was that it had been successfully carried out in one of the great plague spots of the world. In Italy, in India, in many parts of Africa and in the United States the anti-malarial campaign was being pushed on with the same vigour and success. After referring to the brilliant success of Bruce and his colleagues in clearing Malta of Malta fever, he said a vigorous campaign had been instituted against the group of diseases caused by the trypanosomes, the dreaded sleeping sickness, which now extended over a million square miles, but showed a steady diminution in Uganda, where no whites had been attacked since 1906. Two things were necessary to a successful plan of campaign. First, organized centres from which the work might proceed. A model of this sort was the Sleeping Sickness Bureau, under the auspices of the Royal Society. Similarly organized central bodies had already dealt with plague and malaria, but these organizations should be placed on a permanent basis and unified in some way under a central tropical institute, the different departments of which would be in touch with its workers all over the

world. This was no vain dream. By far the most useful work in British medicine during the past twenty years had been the result of carefully planned expeditions sent out, partly by the liberality of the citizens of Liverpool, particularly Sir Alfred Jones, and partly by the Government and the Royal Society. Societies for the study of tropical diseases had been organized in different countries and international societies had been formed, and at large seaports hospital wards devoted entirely to tropical diseases had been opened. This country might feel a just pride in the schools which had been started in its two great seaports. In the hands of Ronald Ross and Rubert Boyce, the Liverpool School, founded ten years ago by Sir Alfred Jones, had had a career of extraordinary vigour, and had dispatched twenty-one research expeditions to the tropics. The entire plant of the school and the cost of the expeditions had been less than £75,000, a very modest sum considering the results. The London School was started ten years ago by the wisdom of Mr. Joseph Chamberlain, and it had had the great advantage of the guidance and the prestige of the name of Sir Patrick Manson, the Dean of all students of tropical medicine. To him, more than to any one man, they owed the strong position occupied by the subject to-day in Great Britain. In the heart of the Empire, in its richest and largest city, they naturally expected a foundation commensurate with its advantages and its responsibilities. The school had trained nearly 1,000 men for work in the colonies and dependencies. It had fostered original research in tropical diseases, and had been an important centre for the diffusion of scientific knowledge. The possibilities existed for the greatest of all schools of tropical medicine if London would but rise to the occasion. He was astonished that so much good work had been done on a total capital of less than £40,000, a sum not more than sufficient to maintain one department. Millions were contributed annually for church missions; it was not too much to ask for rich endowments for the missions of science. The great question of tropical sanitation in which they had only made a start, was bound to loom larger and larger in importance. England had the first start; the United States, Germany, France, Holland, Japan were in the field. Now was the time for new enterprises, and for a more complete organization. If he were "Minister for Tropical Dependencies" he would establish a number of professorships, two of tropical medicine (with a hospital of 200 beds), and professorships of pathology, protozoology, helminthology, and entomology, with laboratories, museums, and libraries. He would further establish subsidiary schools in the tropics, which would serve as centres for the mission work in those countries. That was not a visionary scheme, but one well within the possibility of achievement, and it would not demand an endowment of more than two millions. No nation in history ever had such a load of responsibility, and it behoved them to see that they were well equipped for the task of the future, to give to the teeming millions of our dependencies the greatest of all blessings in life—good health.

The AMERICAN AMBASSADOR said the lecturer had impressed him with the madness of nations which had great tropical dependencies and did not cultivate tropical medicine. It seemed to him that the nation which neglected its duty in that way was blind to its own interests, and, if there was much communication between the dependency and the governing country, that the latter was blind also to its own safety. Moreover, they should remember that they sent out to the tropics the flower of their manhood. It was their duty to protect and help them as much as possible by research in the directions indicated by Professor Osler. The work already accomplished should be an incentive to further effort.

Professor SIMPSON, C.M.G., proposed and Major ROSS, C.B., seconded a vote of thanks to Professor Osler.

Mr. PERCEVAL A. NAIRNE proposed and Sir PATRICK MANSON seconded a vote of thanks to the Chairman, and the proceedings terminated.

THE ANNUAL DINNER.

The annual dinner of the school was held in the evening at the Hotel Savoy. Dr. A. G. Bagshawe, Director of the Sleeping Sickness Bureau, presided, and among those present were Lord Sheffield, Sir Patrick Manson, Sir Francis Lovell, Sir William Treacher, Mr. H. J. Read, C.M.G., of the Colonial Office, Dr. H. A. Miers, Major Ronald Ross, and many others. After the usual loyal toasts the CHAIRMAN proposed "The School." He said that during the ten years of its existence nearly 1,000 students had gone through its courses. A few days ago he visited the institution after the lapse of nine years, and he found great changes. What struck him most was the ingenuity displayed in making the most of the available space. The committee were badly in need of more land and of further resources for building laboratories on it. Tropical medicine had made great strides during the last few years, but the progress of research, and, in some respects, of preventive measures, lagged behind. He was afraid that the administrators in tropical countries had not always had a proper appreciation of the value of hygienic measures recommended by medical officers. He mentioned that steps had been taken to form a West African special sanitary service, and it appeared that the Indian Government were awakening to a sense of their responsibility and taking more active measures than hitherto with regard to malaria.

Sir PATRICK MANSON proposed the health of Professor Osler, who was prevented by indisposition from being present. After paying a glowing tribute to the Professor's great qualities as a physician and a man of much various learning, he went on to emphasize the importance of teaching the public to demand that tropical medicine should be recognized by the authorities. The London School depended on public subscriptions more or less, and they were not so fortunate as their friends in Liverpool. The merchants and wealthy residents of Liverpool—a little village with a population of some 700,000—had contributed £75,000 towards the cause of tropical medicine, whereas London, with a population of 7,000,000, had given the London School only half that sum. Want of money seriously crippled the school in the work of research, and this was a reproach to the inhabitants of the metropolis of the Empire which should be removed.

Dr. MIERS, replying to the toast on behalf of the absent orator, said that one of the best things which had come out of Canada to England was Professor Osler.

The toast of "The Guests" was proposed by Sir W. H. TREACHER, and replied to by

Lord SHEFFIELD, who dwelt on the economic value of the work of the School of Tropical Medicine. He said that in these days when money was allocated for all sorts of purposes, and when a matter of two millions was thrown across the table in an amendment without exciting surprise, it was to be regretted that the Colonial Office did not demand money for the sanitation of our dependencies and for the advance of science having for its object the saving of the lives of our countrymen and the promotion of the physical welfare of the native races to whom we brought the blessings of civilization. A couple of millions, which would bring an income of £60,000, would suffice for the present.

Major RONALD ROSS also replied.

Mr. CANTLIE proposed the health of "The Chairman." He asked those present to imagine that instead of a carpet they had beneath their feet the arid sand of the African desert, and that the plants decorating the tables were transformed to the scrub, the bush, and the cactus on the shores of the Victoria Nyanza. He went on to say that the late autumn flies which maintained their lethargic existence—a state resembling one of sleeping sickness—became the deadly tsetse fly; the tobacco smoke finding its way ceilingwards had its resemblance to the smoke from the wood fires of the kraals and villages; and the globe of electric light above them they might for the time being regard as the fierce sun of Central Africa. Their Chairman, now in the trim evening dress of civilization, they might have seen in the surroundings indicated, equipped in pith helmet, green goggles, khaki kit, putties, and with the inevitable mosquito net veiling. Thus attired he pursued his scientific investigations, now seeking a crocodile's lair to ascertain whether he played a part in the life history of the trypanosome, now searching for the breeding places of the tsetse or investigating sleeping sickness in the persons of the infected natives. Now Dr. Bagshawe's mode of activity had changed. From his office in London he directed the work of the Sleeping

Sickness Bureau. He was the brain of the movement for investigating sleeping sickness, the general staff on whose efforts depended the achievement of success; as Moltke conquered his country's enemies from his office in the German war department, so Dr. Bagshawe was achieving success from the quiet of his office in London. Not only was he the director of the bureau, but he was the recording angel of all that was being done in sleeping sickness by men of different nations, and he supplied them from time to time with translations from languages which were closed books to most of them. Dr. Bagshawe was a quiet man. The silence of a Government official was upon him, a silence, however, which did not mean apathy or want of enthusiasm or of energy. They of the London School of Tropical Medicine knew well the silent work of the men at the Colonial Office. Without their far-seeing enterprise, their regard for the health of the people, both natives and European, under their régime, the school would never have existed. He knew Dr. Bagshawe's desire would carry him to the front of the present campaign against sleeping sickness. He would prefer to be with Ross in one of his meteoric descents on various pestilential spots of the earth, or with Simpson in his peregrinations in many countries—now in China, now in South Africa or in the West African Colonies; and he was sure there was nothing he would desire more than to be with Bruce and his gallant band in the highlands of Uganda. Were he to paraphrase an old song he would say:

His *heart's* in the *Highlands*, his hopes they are high,
His heart's in *Uganda*, achasing the fly.
There *sleep* as a *sickness* he dares to defy,
And the trypanosome trembles when Bagshawe is nigh.

WORKMEN'S COMPENSATION STATISTICS FOR 1908.

The Blue Book issued by the Home Office* on Statistics of Compensation and of proceedings under the Workmen's Compensation Act (1906) and the Employers' Liability Act (1880), for the year 1908 is of much interest.

It is pointed out in it that the Workmen's Compensation Act of 1906 extended the field of compensation by (*a*) including all occupations, whether the employment is by way of manual labour, clerical work, or otherwise; certain exceptions being persons employed otherwise than by manual labour whose remuneration exceeds £250 a year; those whose employment is of a casual nature, and who are employed otherwise than for the purposes of the employer's trade or business; members of the police forces; persons in the service of the Crown, naval or military; outworkers; members of the employer's family dwelling in his house; (*b*) reducing the period of disablement which entitles to compensation from a fortnight to one week; (*c*) extending compensation to injuries caused by certain industrial diseases.

In the shipping industry the returns show 371 fatal cases, and the compensation paid averaged £165 a case. This includes both those cases in which the deceased left persons wholly dependent and those in which the deceased left persons partially dependent; of cases of disablement there were 5,877, and the average compensation was £8 15s.

In the returns in respect of industries carried on in factories to which the Factory and Workshop Act (1901) applies, there are recorded 951 fatal accidents, with an average compensation award of £137; in the 136,357 cases of disablement, the average award was £4 17s. In respect of industrial disease, compensation was paid in 24 fatal cases with an average of £151; there were 542 cases of disablement under this head, and the average compensation was £14.

In docks the number of fatal cases returned was 156, and the compensation averaged £136 per case; the cases of disablement numbered 10,591, and the compensation worked out at an average of £6 3s.; the compensation paid for industrial disease amounted to £254.

In mines the number of fatal cases in which compensation was paid was 1,301, averaging £174 a case; in respect of the 137,622 non-fatal cases, the compensation averaged £4 8s. The total amount paid in respect of industrial diseases was £13,382. It is interesting to note that during the year 261½ million tons of coal were raised and about 4 million tons of other materials. Estimating the compensation payable for injuries at other mines at about twenty-seven or twenty-eight thousand pounds, the charge placed by the Act on coal-producing mines calculated on the ton of mineral raised worked out at 0.7d. The number of persons employed in coal-producing mines, above and below ground, was 972,232, and the compensation paid during the year amounts to an average of nearly 17s. a head.

In quarries there were 88 fatal cases, and the average compensation was £131 a case; in respect of the 5,284 cases of disablement the average was £4 7s.

In construction works the number of fatal cases was 119, and the average compensation paid was £114. The cases of disablement numbered 6,805, and in these the compensation averaged £5 12s. Only £108 was paid in respect of industrial disease.

In railways, in respect of the clerical staff, there were 3 fatal cases and 39 cases of disablement. Among other railway workers, there were 458 fatal cases, in which the compensation averaged £147, and in the 20,649 cases of disablement the average compensation paid was £4. Compensation for industrial disease only amounted to £72. The amount paid in compensation during the year for railway servants, excluding the clerical staff, works out at 7s. 7d. per head.

The returns for industrial diseases show 26 cases of death and 2,260 cases of disablement. In the mining industry there were 386 cases of nystagmus, 6 of ankylostomiasis, 459 of beat hand, 537 of beat knee, 67 of beat elbow, and 87 of inflammation of the synovial lining of the wrist-joint and tendon sheaths. There were 421 cases of lead poisoning, 23 of anthrax, 15 of arsenic poisoning, 20 of chrome poisoning, and 10 of compressed air illness. It is interesting to note that in the seven groups of industries dealt with in the report no cases of poisoning by carbon bisulphide, nitrous fumes, nickel carbonyl, or African boxwood occurred, and there was no case of glanders.

The Employers' Liability Act of 1880 appears to be falling into disuse, as only 260 cases under it were taken into English county courts during the year: 148 of these were withdrawn or settled out of court, and of those going to trial the plaintiff was successful only in 67. It is remarkable that only one case arose under this Act in the whole of the mining industry, 1 from the quarries, and 7 from railways.

As to the services rendered by medical referees under Schedule II, the total number of references (England, Scotland, Ireland) was 272; of these 136 were from the judge, 43 from an agreed arbitrator, and 93 from committees. Under Schedule I (18), which provides for a certificate to be given in cases referred on the joint request of employer and workman, there were 142 references; 58 of these had regard to the condition of the workmen; 4 to the cause of the incapacity, and 80 included both these matters. Under the Schedule which deals with a workman who, being in receipt of a weekly payment ceases to reside in the United Kingdom, there were only two references. Medical referees sat as assessors in 145 cases only. There were 36 appeals against the decision of the certifying surgeon; 1 case was settled out of court, in 20 the decision was confirmed, and in 15 it was upset. The total number of cases taken into court under the Act of 1906 was 5,358; the proportion of appeals was under 2 per cent. of the cases coming before County Courts. There were three appeals to the House of Lords (two by employers and one by a workman); all three failed. The report contains many very interesting details and is of great value to those who are interested in the working of the Acts.

* Printed for His Majesty's Stationery Office by Darling and Son, Limited, London. May be purchased, either directly or through any bookseller, from Wyman and Sons, Limited, Fetter Lane, E.C.; Oliver and Boyd, Tweeddale Court, Edinburgh; or E. Ponsonby, 116, Grafton Street, Dublin. Price 7d.

It was mentioned last week that the large sum of £10,000 had again been divided among the hospitals and nursing institutions of Birmingham by the Hospital Saturday Fund. It is stated that since the establishment of the fund the General Hospital and its convalescent hospital, the Jaffray Hospital, have received no less than £100,503; the Queen's Hospital, £55,680; the General Dispensary, £30,061; the Children's Hospital, £23,152; the Eye Hospital, £17,391; and the Women's Hospital, £11,642.

LITERARY NOTES.

AT this time it may not be inappropriate to mention that the address delivered to the students of the medical school of the Middlesex Hospital at the opening of the winter session last year by Mr. Rudyard Kipling has been reprinted by Macmillan and Co., and is sold for the benefit of the hospital. It contains a preface by Mr. Reginald Lucas, member of the Board of Management, who gives a short history of the hospital, and especially of the Cancer Charity connected therewith, with its research laboratory. Some of the many remedies that have at various times been suggested for cancer are mentioned. Among these is Guy's caustic, which is said to have killed Lord Bolingbroke, who, as is known, was afflicted with what was probably a rodent ulcer of the face. We hear further of Lord Arundel's cancer cure, described as a compound invented by the illiterate wife of a blacksmith. An unkind commentator observes that this cancer curer "no doubt . . . killed a number of poor women." An American practitioner, Dr. Fell, was permitted to make a series of experiments in 1857, but nothing seems to have come of them. Arnott's freezing system, which was tried about the same time, though it seemed to offer some hope of good results, soon followed Fell's method into oblivion. The substance of Mr. Kipling's address was published in the JOURNAL last year, and therefore we need say nothing more about it than that it displays the well-known qualities of his style in their raciest form. We may, however, be allowed to recall some of his *obiter dicta*, as they may rank among what Carlyle would have called "eternal verities." All experienced practitioners will doubtless agree with the doctor who told him that all patients are phenomenal liars where their own symptoms are concerned. Mr. Kipling asked his audience if they were aware of any change in public opinion which would allow them not to attend a patient even when they knew that the man never meant to pay them. The answer to this is still in the negative, and coroners and journalists can always play to the gallery on this point with the certainty of bringing down the house, especially that considerable part of it that gets in with "paper." The part of "vicarious philanthropist" will doubtless continue to be thrust on the unfortunate doctor by men who would reject with just scorn any proposition that they should sell their own work or wares for nothing. Touching on the question of hospital abuse, Mr. Kipling asked his hearers if they had heard any outcry against those people who are perfectly able to pay for medical attention and surgical appliances, and yet cadge round the hospitals for free advice, a cork leg, or a glass eye. Here, again, the answer must still be No, and will, it may be prophesied with confidence, continue to be so for a long time to come. Mr. Kipling's remarks on the attacks made by fanatics on experimental research are worth quoting in full:

> You have been exposed—you always will be exposed—to the attacks of those persons who consider their own undisciplined emotions more important than the world's most bitter agonies—the people who would limit and cripple and hamper research because they fear that research may be accompanied by a little pain and suffering. But you have heard this afternoon a little of the history of your profession. You will find that such people have been with you—or, rather, against you—from the very beginning; ever since, I should say, the earliest Egyptians erected images in honour of cats and dogs on the banks of the Nile. Yet your work goes on, and will go on.

One of these people is Mr. Stephen Coleridge, who has for some time dropped the title of "Honorary" Secretary of the National Antivivisection Society, on which he was wont to insist, and is now described as "Director and Treasurer." Does this mean that he has been content to exchange the empty title of "Honorary" for a solid honorarium? We do not know if this be so, and in any case the matter concerns only himself and his society. Like Verges, he will be talking, but the general public knows by this time how to estimate at its true value the tediousness which—by way, we suppose, of justifying his existence—he bestows upon it so copiously. He is fond of quoting condemnations of vivisection by men who knew, if that be possible, less of the subject at first hand than himself. He has lately unearthed from the *Idler* an utterance of Samuel Johnson in which he treats experimenters as he did the "Whig dogs" in his reports of the Parliament of Lilliput, where he took care to let them have the worst of it. The paper quoted was written in 1758. The following later deliverance of the great moralist may perhaps interest Mr. Coleridge. It occurs in Boswell's *Life*, under the date 1784, the year of Johnson's death:

> I told him (says Miss Seward) in one of my latest visits to him, of a wonderful learned pig, which I had seen at Nottingham; and which did all that we have observed exhibited by dogs and horses. The subject amused him. "Then" (said he), "the pigs are a race unjustly calumniated. *Pig* has, it seems, not been wanting to *man*, but *man* to *pig*. We do not allow *time* for his education; we kill him at a year old." Mr. Henry White, who was present, observed that if this instance had happened in or before Pope's time he would not have been justified in instancing the swine as the lowest degree of grovelling instinct.
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> Dr. Johnson seemed pleased with the observation, while the person who made it proceeded to remark that great torture must have been employed ere the indocility of the animal could have been subdued. "Certainly," said the doctor; "but," turning to me, "how old is your pig?" I told him three years old. "Then," said he, "the pig has no cause to complain; he would have been killed the first year if he had not been *educated*, and protracted existence is a good recompense for a very considerable degree of torture."

"Torture," it may be noted, is the word Mr. Coleridge is so fond of applying to painless experiments which are often the means of giving a number of animals a "protracted existence." It may safely be assumed that a man of Johnson's strong sense would not have written such a passage as that quoted from the *Idler* were he alive now. It is as disingenuous to quote his words as bearing on vivisection at the present day as it would be to quote the details of an execution in the days of Henry VIII as applicable to our own time.

In the Section of Anthropology of the British Association this year Miss A. C. Breton said that the different race types in the ancient sculptures and paintings found in Mexico and Central America formed an important anthropological study. An enormous mass of material, evidently of many periods, had been collected. It included sculpture, archaic stone statuettes, the portrait statues and reliefs at Chichen Itza, the Palenque reliefs and the series of magnificent stelae and lintels at Piedras Negras, Yaxchilan, Naranjo, Copan, Quirigua, etc. In terra-cotta or clay there were the hundreds of thousands of small portrait heads and figurines found at Teotihuacan, Otumba, the neighbourhood of Toluca, and other ancient sites. Larger clay figures had been found in quantities in tombs, as in the States of Jalisco and Oaxaca; these were made as offerings, instead of the sacrifice at a chief's burial of his wives and servants. Small jadeite heads and figures, also found in tombs, showed strongly marked types. There were few specimens in gold, because throughout the country the Spaniards ransacked the tombs for gold. In painting there were the picture manuscripts, the frescoes at Chichen Itza, Chacmultun, and Teotihuacan, and a number of vases with figures from Guatemala and British Honduras. Among distinctive types were: The chiefs in the reliefs at Xochicales, who sat cross-legged; the little shaven clay heads at Teotihuacan; the tall, well-built priests, with protruding lower lip, of the Palenque reliefs; the fifteen caryatid statues in feather mantles, of the Upper Temple of the Tigers, at Chichen Itza; and the sixteen stern warriors carved at its doors, these last similar in type to some of the modern Indians of the villages near Tlaxcala. There were portraits of the Mexican kings on the border of a picture map which represented the western quarter of Tenochtitlan, and of the householders in that part of the city. Of female types there were the painted clay figures of Jalises with compressed heads. Some of them had short, broad figures, others were slender. Both types still survived. The queenly woman in Codex Nuttall-Zouche, and the women-chiefs of the Guatemalan stelae belonged to a different caste from the obviously inferior women on those stelae, fattened in preparation for sacrifice. Herr T. Maler's most recent explorations on the borders of Guatemala had given magnificent results in the finding of thirty-seven stelae at Piedras Negras, and at Yaxchilan twenty stelae and forty-six sculptured lintels. The superb figures of warriors and priests indicated a race of men of tall, slender stature and oval face, with large aquiline nose, whilst the captives appeared to be of a different race.

BRITISH MEDICAL BENEVOLENT FUND.

At the October meeting of the Committee 27 cases were considered, and grants amounting to £246 made to 22 of the applicants. Appended is an abstract of the cases assisted:

1. Widow, aged 40, of M.R.C.S., L.R.C.P. Quite unprovided for at husband's death, and at present, owing to a nervous breakdown, is incapable of supporting herself. No children. Voted £10.
2. Widow, aged 61, of M.R.C.S., L.S.A. Practically unprovided for at husband's death a few years ago, and has failed to maintain herself by taking boarders. Children only able to give very slight help. Voted £12.
3. Widow, aged 42, of F.R.C.S., who was for many years a teacher at a London medical school. Since husband's death has supported herself by letting lodgings or acting as housekeeper, but was compelled to give up her last post on account of ill-health. Now proposes to start a small tea-shop. Three children, all in institutions. Voted £15.
4. Widow, aged 41, of L.R.C.S., L.R.C.P.I., who practised in West Africa. Quite unprovided for, and endeavouring to obtain boarders or lodgers. Four children, of whom two are still at school. Voted £10.
5. M.R.C.S., L.S.A., aged 84, who practised in London. No income; children only just self-supporting; receives a little help from relations. Voted £12.
6. Widow, aged 69, of M.R.C.S. Only income £10 a year, and has been assisted by her daughter, whose earnings have so much decreased that the help has to be withdrawn. Relieved four times, £50. Voted £12.
7. Widow, aged 55, of L.S.A. No income and dependent on a son earning 35s. a week. Relieved eight times, £90. Voted £12.
8. Daughter, aged 41, of late F.R.C.S. Quite unable to earn a living, owing to continued ill-health, and dependent on her mother, whose income is £30 a year. Relieved nine times, £84. Voted £12.
9. Widow, aged 42, of L.R.C.P.Edin., M.R.C.S. Quite unprovided for at husband's death from new growth a year ago, and endeavours to support herself by letting lodgings. Slight help from a stepson in the merchant service. Relieved once, £12. Voted £12.
10. Widow, aged 52, of M.B., C.M.Aberd. Income £19 a year, and makes a few shillings a week by taking boarders. Three children still at school. Relieved twice, £15. Voted £5.
11. Widow, aged 62, of L.R.C.P.Edin., M.R.C.S.Eng. Is helped by her daughter, a governess, and earns a little by teaching. Relieved eleven times, £87. Voted £5.
12. Daughters, aged 45 and 37, of late L.S.A. Both unable to earn a living on account of persistent ill health. Relieved five times, £60. Voted £12.
13. Widow, aged 60, of M.R.C.S. No income; a few shillings a week allowed by children. Health too feeble to permit of occupation. Relieved eleven times, £123. Voted £12.
14. Daughter, aged 69, of late M.R.C.S. Lost her father when 3 years old, and has supported herself since the age of 17. After being a governess for many years took a house and received boarders, but has recently found herself unable to meet expenses. Relieved twice, £19. Voted £5.
15. Daughter, aged 57, of late L.R.C.P., L.S.A. Being very deaf and incapable of earning a living is dependent on a sister, a mental nurse, who is unable to earn as much as formerly. Relieved four times, £14. Voted £12.
16. Widow, aged 53, of M.R.C.S., L.S.A. No income; no children; health very feeble. Relieved six times, £56. Voted £12.
17. Daughter, aged 38, of late F.R.C.S. No income, and owing to tuberculous disease of a large joint is only able to do light work occasionally. Receives a small weekly allowance from another charity. Relieved three times, £36. Voted £12.
18. L.R.C.P., L.R.C.S.Edin., aged 74. Has been unable to practise for some years past owing to deafness and ill-health, and is now practically dependent on friends. Relieved three times, £29. Voted £12.
19. M.D.Aberd., aged 57. Is quite incapacitated by lateral sclerosis. Only income two small pensions from charities. Two children, both still at school. Relieved once, £10. Voted £18.
20. Widow, aged 64, of M.R.C.S. Owns a small property in Ireland, but the income has now diminished to a few shillings a week. Children just self-supporting. Relieved ten times, £82. Voted £10.
21. Daughter, aged 60, of late M.R.C.S. No income; slight help from friends; earns a few pounds yearly by knitting. Relieved five times, £54. Voted £12.
22. Widow, aged 69, of M.D.St.Andrews. Being unprovided for at husband's death established a home for invalids, but was unable to meet expenses; is now dependent on occasional help from friends. Relieved twice, £60. Voted £12.

Contributions may be sent to the Honorary Treasurer, Dr. Samuel West, 15, Wimpole Street, W.

The South-West London Medical Society opened its winter session at the Bolingbroke Hospital on October 12th, the new president, Dr. Leonard McManus, being in the chair.

Medical News.

The Edinburgh University Club in London will hold its next dinner on Friday, November 12th, when the chair will be taken by Mr. J. D. Malcolm, F.R.C.S.

On October 19th, Mr. T. Johnston, M.R.C.S., was presented, on the occasion of his leaving Rugby, with a handsome marble clock by the members of the Ancient Order of Druids, of which he is a Past Arch.

Mr. Charles Ballance, M.V.O., M.S., F.R.C.S., will deliver an address on The Lesson to be learnt in London from the History of the Mastoid Operation, at the Central London Throat and Ear Hospital, Gray's Inn Road, on Monday, November 8th, at 4.30 p.m.

The Association of Medical Men Receiving Resident Patients has appointed Mr. G. F. Darker, of the Middle Temple, who is a barrister with medical qualifications and experience, to be its salaried secretary. The address of the association in future will be 57 and 58, Chancery Lane.

Chester Infirmary has received a gift of £500 out of the fees paid by visitors for viewing the Duke of Westminster's place at Eaton during the past season. The total sum collected and locally distributed among charities was £980.

The annual dinner of the staff and past and present students of the Royal Dental Hospital of London will be held on Saturday, November 20th, at the Hôtel Métropôle (Whitehall Rooms) under the presidency of Mr. C. F. Rilot. Gentlemen either now or formerly connected with the hospital or medical school who may through inadvertence not have received special notice and who desire to be present, are requested to communicate with the Dean at the Royal Dental Hospital, 32, Leicester Square, London.

The second Italian Congress against Tuberculosis was held at Florence on October 10th and following days. The Minister of Agriculture, the Prefect, and other provincial and communal authorities were represented. Professor Lustig delivered an inaugural address, after which he was elected president. It was decided that the next congress should be held in Turin in 1912. Professor Alfonso di Vestea, of the University of Pisa, read a report on tuberculosis in Italy, and on the means, legislative and other, adopted to combat the disease. Professor Pacchioni discussed the public assistance of poor children by means of marine hospitals and summer colonies.

The managers of the *Presse Médicale Italienne*, which, as stated in the Journal on October 2nd, p. 992, was founded for the purpose of making known Italian medical work abroad, intimate that they are prepared to give members of the medical profession visiting Italy all the information which they may require. They issue a *Guide du Voyageur en Italie*, illustrated with numerous vignettes, a copy of which, in German, English, or French, according to the requirements of the visitor, will be sent gratuitously on application. The address is Via S. Marco 12, Milan.

The usual monthly meeting of the Executive Committee of the Medical Sickness, Annuity, and Life Assurance Society was held at 429, Strand, London, W.C., on October 15th, Dr. de Havilland-Hall in the chair. The accounts presented showed the working of the society up to the end of September last, and enabled a comparison to be made between the experience of the society during the summer of this year and during the corresponding period of previous years. As usual, the sickness claims were much more numerous in the months of January to April than in the months following, and this feature of the business will probably remain unaltered so long as the members of the society are, as at present, mostly medical men in general practice. These are, of course, peculiarly liable to throat and chest affections caused by exposure to bad weather, and claims of this kind have always swelled the sickness lists of the society in the early months of the year, while, as the weather gets warmer, these claims become few. The variation between the amount of winter and summer sickness experienced by the society is, however, slowly but surely lessening, owing to the steady growth of what is called the "chronic list." This consists of the claims of members who are never likely to be able to perform any more professional work and who draw sick pay continuously. In these cases, of course, the summer and winter experience is the same, and as they are getting more and more numerous—there are at present at least forty of such cases—they tend to make the whole sickness experience of the society more level. Prospectuses and all information on application to Mr. F. Addiscott, Secretary, Medical Sickness and Accident Society, 33, hancery Lane, London, W.C.

British Medical Journal.

SATURDAY, OCTOBER 30TH, 1909.

THE HOUSING AND TOWN PLANNING BILL.

ALTHOUGH the amendments to the Housing Bill which have been made by the House of Lords are many and various, an impartial consideration does not seem to justify the opinion expressed more than once by Lord Crewe that the bill had been rendered unworkable. So far as can be foreseen at present the bill has been improved in some respects while in others purely negative results will follow the alterations. Clause 2 makes provision for the compulsory purchase of land by a local authority for the purposes of Part III of the Housing of the Working Classes Act (1890) by means of an order approved by the Local Government Board. In the event of the owner objecting to sell his land the bill, as it left the House of Commons, required that an inquiry into the circumstances should be made by the Local Government Board. The Lords were evidently averse to this inquiry being conducted by an official and insisted that it should be made by an impartial person not in the employment of any Government department, a proposal which does not affect the principle, and may seem to many an actual improvement. One of the most important clauses of the bill is that which empowers the Local Government Board to require sanitary authorities to carry out the duties already imposed upon them by existing Acts. One amendment to this clause excludes the London County Council and the councils of the county boroughs from its provisions, an exclusion for which there is this justification—that few of these bodies neglect their responsibilities in this respect. This clause was further amended by requiring the Local Government Board, before making an order as to the provision of houses by the sanitary authority, to take into consideration the probability that further accommodation for the housing of the working classes in the district would be otherwise provided—an amendment of doubtful utility.

Houses let at a rental under £40 per annum in London, and in towns having a population over 50,000 persons under £26, and elsewhere under £16, are required under the bill to be let under an implied condition that during the tenancy they are kept by the landlord in all respects reasonably fit for human habitation. If this condition is not complied with, the sanitary authority may call upon the landlord to make certain specified alterations, and, failing his compliance with the requirements of the authority, it may carry out the necessary works at the cost of the landlord. By the clause as it left the House of Commons appeal against the action of the authority was to the Local Government Board, but as amended by the House of Lords would give the option of appeal to the county court of the district. This alteration may be, from the point of view of legal theory, an improvement, and might, under conditions easily imagined, save some time and money; but in practice it is open to objection. The county court judge could only decide on evidence given before him, and it is pretty certain that this would usually be conflicting, whereas the Local Government Board could decide after impartial expert examination. A further amendment would enable the landlord to himself close the house in question for human habitation. Two important definitions have been inserted in the bill: A landlord is defined as a person who lets a house to a tenant for his own habitation; and the working classes are defined as including mechanics, artisans, labourers, and others working for wages; hawkers, costermongers, persons not working for wages but working at some trade or handicraft without employing others except members of their own family; and persons whose income does not exceed an average of 30s. a week.

It can hardly be contended that the amendments to which we have referred have very materially weakened the Bill, but its usefulness has undoubtedly been lessened by the omission of certain provisions which were in the measure when it left the House of Commons. To substantiate this statement we need only mention the deletion of the sub-clause which enabled the Local Government Board to prescribe the duties of medical officers of health appointed by county councils, and that which secured these officials from dismissal without the consent of the Board. The representatives of the county councils in the House of Lords who objected to these sub-clauses did not appear to realize that although county councils have now been in existence more than twenty years, only a small number of them admit that they have any public health responsibilities at all. One of the most frequently expressed reasons for not even appointing a county medical officer of health has been the absence of any stated duties for him to perform, and although the bill requires every county council to appoint a medical officer, it is extremely probable that the indifferent councils will try to limit his activity in every possible way, and if he places before them unpalatable advice he will speedily be got rid of under some specious pretext or other.

While the responsibility for the removal of these important sub-clauses from the bill lies with the Opposition, yet the Government strenuously opposed a sub-clause which was proposed by Lord Harrowby and supported by Lord Lytton, having for its object the abolition of the custom of electing whole-time medical officers of health for short periods. This action of the Government is difficult to reconcile with the views expressed by Lord Beauchamp when he moved the second reading of the bill on September 14th. Almost his first words on that occasion directed attention to the clause in the bill which strengthened the position of medical officers of health in dealing with property which belonged to members of the body which appointed them. It was absolutely unfair, he said, to expect such officers to report very adversely on such property when such criticism might result in their dismissal. But when he had the opportunity of curing the evil which he deplored he prevented the application of the remedy. If the bill is passed as it stands, and if it is wisely and judiciously administered, it can do a large amount of good in large centres of population, although it is to be feared that in the small towns and rural districts where its machinery has to be set in motion by an official who holds office on such precarious terms as the medical officer of health, little benefit will result. The door has been opened to great reforms, but care has been taken to effectually block it against their admission.

LATENT NEURASTHENIA.

Among the many forms of neurosis with which the practitioner has to deal, there are few more difficult to tackle effectively than those in which the nerve disturbance is only one among the influences at work in the production of the morbid condition. There is a large group of persons who cannot possibly be described as neurotics, and who yet, under certain conditions, present symptoms which are mainly due to nervous causes, although for a long time it may appear that the nervous system has little part in their causation. Such patients are often to be found among highly intelligent men and women actively engaged in pursuits which require an acute and well-balanced brain, and having little time or inclination to allow their minds to dwell on their own maladies. They are in fact the very opposite of the self-centred hypochondriacs in whom neurotic manifestations are mostly to be looked for.

Among the former, while all goes well, there is often no sign of nerve disturbance; they are not, as a rule, subjects of what may be described as primary neurasthenia. It is when the organic functions are disturbed by some cause that the oversensitive nervous system shows itself by an exaggeration of the normal symptoms in a manner most distressing to the patient and very baffling to the physician. Thus in an individual of the group referred to, when the subject of a mild bronchitis apparently pursuing a perfectly normal course, a cough may develop which is out of proportion to the physical signs, and which is not relieved by any of the usual remedies. In spite of great distress by day and sleepless nights, pulse and temperature remain unaffected, and after a variable time the cough disappears with absolute suddenness. The condition is not at all uncommon in children, and when the nervous disturbance is great it bears a suggestive resemblance to whooping-cough.

A much more serious development is when a slight gastric catarrh leads to vomiting so persistent that no food can be taken, and the patient is brought into a dangerous condition from weakness, although the actual abdominal disorder is quite trifling. A similar exaggeration of symptoms is sometimes seen in elderly men suffering from enlarged prostate, when, although the enlargement is not at all exceptional and the amount of residual urine which can be drawn off by the catheter does not exceed 2 to 3 oz., still the call to micturate is so constant as to make life a misery.

In all cases of the kind referred to the treatment presents considerable difficulty, inasmuch as the ordinary remedies appear to have little or no effect on the symptoms. Complete rest seems to do most good, and rest in the intervals between the attacks is of great value, but this last is with great difficulty secured, as the patients at such times feel quite well, and are unwilling to submit to medical treatment. Much benefit can be derived from residence for one or two months at a high altitude of from 5,000 to 6,000 ft. This will occasionally produce so much improvement that no fresh attack will occur before the following summer, when the same cure can again be tried, but, unfortunately, the effect is rarely so decided.

Even more important than the treatment to be adopted is the necessity for those in charge of these cases to avoid the pitfalls into which they may readily fall, unless the true explanation of the acute symptoms is quickly grasped. Not only may an unduly unfavourable prognosis be given, but the patient may easily be exposed to the risks of an unnecessary operation. It has happened that a quite moderately enlarged prostate has been removed without much benefit, and even with a fatal result, and an abdominal section has been performed only to find all the abdominal organs apparently quite healthy.

All brain workers appear to be especially liable to this latent form of neurasthenia, and it is very commonly seen in members of the Jewish race, and in artists of all descriptions. Acute symptoms in these are to be looked upon with suspicion, unless matched by the physical signs, and in forming an opinion of the case it is necessary never to lose sight of the possibility that much of the distress may be due to an excessive nervous response to slight or moderate stimuli.

THE INTERNATIONAL OFFICE OF PUBLIC HEALTH.

The International Office of Public Health, to the establishment of which all the Governments that took part in the sanitary conference at Rome in 1907 agreed, has been at work for about a year, and has issued monthly since January last a *Bulletin* containing information with regard to infectious diseases and sanitary laws and regulations in the participating countries. The idea of establishing such an office was first mooted at the International Sanitary Conference in Vienna in 1874, but nothing came of the scheme then put forward. At the conference at Washington in 1881 proposals for the dissemination of information as to cholera, plague, and yellow fever were considered, and at the conference at Rome in 1885 a proposal was discussed favouring the establishment in each country of a central office which should collect information and warnings with regard to sanitary matters, and exchange such information with the offices of other countries. At the conference in Paris in 1903 it was definitely proposed to centralize all information with regard to epidemic diseases and the means of preventing them, with the object of furnishing information with regularity to all the participating States. The duty of taking the initiative in organizing the international office of public health was left to France, and in 1907 a scheme was discussed at a meeting of representatives of thirteen Governments held at Rome. The countries concerned—Great Britain, Belgium, Brazil, Spain, the United States, France, Italy, Holland, Portugal, Roumania, Russia, Switzerland, and Egypt—agreed to contribute proportionally to the expense of establishing and maintaining the office. A Permanent International Committee was formed of representatives of the Governments concerned, the delegate for this country being Dr. Theodore Thomson, Medical Inspector to the Local Government Board. At the first meeting Dr. Santoliquido, the Italian delegate, was elected chairman, M. J. de Cazotte, a member of the French diplomatic service, who is stated to possess special experience in international sanitary police, was appointed director, and Dr. Pottevin, formerly director of the sanitary office at Havre, secretary-general.

The true object of the office is, to quote the words of the statutes of constitution, "to collect and bring to "the knowledge of the participating States the facts "and documents of a general character which relate "to public health, and especially as regards infectious "diseases—notably cholera, plague, and yellow fever, "as well as the measures taken to combat these "diseases." Some difficulty appears to have been

experienced in drafting this Article, as it was felt to be essential not to assign to the office duties which might be interpreted as entitling it to interfere with the sovereign rights of any State. M. Barrère, who, as French Ambassador, presided at the conference at Rome, said that it was essential to recognize that there was no idea of creating a body having any executive power whatever, or any power to intrude into the internal affairs of the different countries. It would have no right of control; its influence would be exclusively moral, and its prestige and authority would, in fact, depend upon this very quality. The second Article lays it down specifically that "the office may not interfere in "any way in the administration of the different "States," and Article 5 provides that "Governments "shall inform the office of the steps taken by them "to insure the application of international sanitary "conventions." The primary duty of the office, therefore, is to collect general information from different sources. But though the powers and duties of the office are thus limited, there can be no doubt that it may render very great services to international hygiene by collecting, arranging, and co-ordinating the information which it receives, and by studying subjects of international importance. It has, for instance, already considered the new conditions brought about by the construction of the Hedjaz railway, a matter to which attention was called in these columns some time ago. The Permanent International Committee, at its first meeting, placed on record the fact that the construction of the railways connecting Medina with Beyrout and Caïffa opened a way for the dissemination of epidemic diseases against which existing sanitary conventions, drawn up with a view of preventing the extension, during the pilgrimage, of cholera and plague by the sea route, did not provide. The committee accordingly adopted resolutions declaring that it is necessary in the interests of public health to add to the existing international sanitary regulations; these alterations can only be brought about by an international conference or by diplomatic procedure. In making the suggestion that the matter might be considered by an international conference, the committee was acting in accordance with Article 5 of the constitution, which empowers the office to suggest modifications which might with advantage be introduced into the provisions of existing international sanitary conventions. The principle could, of course, be extended to many other circumstances which influence the spread of epidemic diseases, such as emigration. The committee would also be within its rights in studying the general prophylactic measures which can be taken against all forms of communicable diseases. Finally, it should be said that the articles provide that the committee and the office shall correspond directly with the higher health authorities of the different countries, and with the sanitary councils of Alexandria, Constantinople, Tangiers, and Teheran.

The monthly *Bulletin* which is being issued will no doubt obviate a great deal of direct correspondence. It contains five sections: (1) Laws and general or local regulations promulgated in the various countries respecting transmissible diseases. (2) Information respecting the spread of infectious diseases. (3) Information respecting the works executed or the measures taken for improving the healthiness of localities. (4) Statistics dealing with public health. (5) Bibliographical notes.

As an illustration of the kind of information given in the *Bulletin*, we may say that the issue for September contains a copy of the agreement between the French and Belgian Governments of May, 1895, as to the notification of communicable diseases occurring on the frontier; a decree of the French Government with reference to the special measures to be taken against the importation and propagation of cholera in France; a copy of a circular on the same subject issued to prefects; a new French decree as to inspection of vessels coming from ports infected by cholera; a similar decree issued by Belgium; and the text of the German law as to the notification of certain diseases and as to the notification of ships in German ports.

Under the second section of the *Bulletin* we find lists of cases of deaths from cholera, plague, and yellow fever, received down to September 15th, and a note on the action taken by Turkey, Russia, Germany, Italy, Holland, Anglo-India, and Belgium, with reference to recent occurrences of cholera. The third section contains articles, for which apparently the director is responsible, on the filtration of drinking water by non-submerged sand filters, and the conclusion of an article on the purification of waste waters from manufactories. Under the fourth heading we find an abstract of the sanitary statistics for 1908 of the twenty principal towns of Egypt. The fifth section consists of short abstracts of papers and reports published in various periodicals. The committee is to meet annually in October, and will hold a second meeting if necessary in April.*

ANNUAL MEETING IN LONDON, 1910.

At the meeting of the Central Council of the British Medical Association on Wednesday last an invitation was received from the Metropolitan Counties Branch to hold the Annual Meeting next year in London, and was unanimously and cordially accepted. The Branch nominated Mr. H. T. Butlin, D.C.L., President of the Royal College of Surgeons of England, and a Vice-President of the British Medical Association, as President-elect, and he was thereupon unanimously elected. The Association has held its Annual Meeting in London on three occasions. The first was in 1862, when Dr. George Burrows was President; the second in 1873, when Sir William Ferguson was President; the third in 1895, when Sir J. Russell Reynolds was President. Mr. Butlin, who has already served the Association in many capacities, in particular as Treasurer for six years, will be a worthy successor of these distinguished men; and it can be said without hesitation that the members of the Metropolitan Counties Branch will not fail to put forth their best efforts to make the meeting as successful or more successful than those which have gone before. We may recall that an announcement has already been made that it is anticipated that invitations will be given to the Association to hold the Annual Meeting in Birmingham in 1911 and in Liverpool in 1912.

WHAT IS A PROPRIETARY REMEDY?

In the medico-legal columns this week will be found a judgement of the Court of Appeal touching a matter of some specific and much general interest. It was a case in which the Inland Revenue Department brought an action under the Medicine Stamp Act for the

* The address of the International Office of Public Health is at present 195, Boulevard St. Germain, Paris, and the subscription for the *Bulletin* is 10 francs a year post free; the price of a single number is 1 franc.

recovery of stamp duties against the English agent of Antineurasthin. For the defence it was urged that the composition of the preparation showed that it was not a medicine, but a food; a view further supported by the allegation that it was so regarded by the revenue authorities in Germany. To a medical mind the term "antineurasthin" would alone seem to indicate therapeutic rather than nutritive purposes, but the magistrate concluded that on the facts laid before him he could not hold it to be a medicine, and dismissed the case. On appeal the judgements quoted were given and the case remitted to the magistrate with an order to convict. The general interest of the matter lies in the fact that the question of what preparations come within the meaning of the Acts under which stamp duty is imposed on medicine and medicaments seems hitherto never to have been considered in detail by the Court of Appeal. On this occasion each of the judges in turn delivered his opinion, and these deliverances, though differing materially in their terms, are all to the same effect. Taking them as a whole, they seem to make it fairly clear that in relation to stamp duty, as in so many other connexions, it is the intention rather than the act which is of chief importance, and they inevitably call to mind the old conundrum, "When is a door not a door?" The analogous questions inferentially asked by the judges were two: When is a food not a food? and When is a drug not a drug, but a proprietary article liable to stamp duty? The answer to the first question would seem to be, "When it is "given not for ordinary purposes of nutrition, but for "the prevention, cure, or relief of disorders or com- "plaints affecting the human body, in which case "food is a drug." The second answer is somewhat more complicated. The question of when a drug ceases to be a drug in the ordinary sense of the term and becomes a patent medicine liable to duty is regulated by the circumstances preceding or accompanying the offering of it to the public, and in no wise by its composition. The "drug" might be a preparation consisting solely of plain bread or simple water, but nevertheless, if marketed in such fashion as to come within the provisions and definitions of the Acts regulating the imposition of a stamp on medicines and medicaments, then the drug would cease to be a drug and become a patent medicine or proprietary article liable to duty. The statements of the judges would seem to imply that, subject to one or other of two provisos, anything and everything vended for internal use or external application must be regarded as liable to stamp duty unless put forward as food for ordinary use, and not as curative or preventive of morbid conditions. The first proviso is that the preparation must be claimed to be made either by a method known only to the manufacturers or by one to the use of which they have an exclusive right or which is protected by patent. The alternative proviso is that the preparation is one which either before or at the time it is sold or offered for sale is claimed—either by public notice or by one accompanying the bottle or package—to be a nostrum or proprietary article, or to have a specific or other beneficial action in the prevention, cure, or relief of any distemper, malady, ailment, disorder, or complaint incident to or in any wise affecting the human body.

HOME RULE FOR LONDON.

THERE will be found in another column (p. 1312) a letter from one of the medical representatives of convocation on the Senate of the University of London which displays with really refreshing ingenuousness the artless attitude of those who are opposed to the introduction of the reforms so obviously necessary in the constitution of that Cinderella of universities. If it were not that they are always characteristic of the high Tory way of thinking—a most respectable turn of mind let it be freely admitted—it would be a little difficult to understand our correspondent's evident annoyance and desire for secrecy. It does not appear that he disputes the accuracy of the information given last week, and he seems to forget that the scheme proposed by Professor Starling and Dr. Hill, together with the memorandum by the first-named, was published in the JOURNAL last March (vol. i, p. 636). Why the appointment of a subcommittee called a faculty board by a body so large as the Faculty of Medicine should be followed by the dire consequences suggested is one of those mysteries which arise only in connexion with the administration of the University of London. We would most humbly submit that it is time to be done with mystery and to let in the free breath of public opinion. Our correspondent reproaches us with not having published the arguments on the other side. If we have not done so, it is because there are none; the opposition to this very simple and businesslike proposal is part and parcel of the long-drawn-out opposition to every proposal to make the university an efficient and effective university for London. That opposition had some twenty or thirty years within which to develop its arguments in Convocation. It produced only prejudices and talk about vested interests. That it failed during all this long period, in spite of the remarkable forensic ability of some of its then spokesmen, to produce arguments is proof sufficient for reasonable men that there were none to produce. That the administration of the Senate as at present constituted has been an egregious failure is sufficiently proved by the one fact that the Government has considered it necessary to appoint another Royal Commission to rescue the university from the muddle, and we may add, on the authority of our correspondent, the risk of bankruptcy into which it has been brought. Many other proofs might be given, but though 'tis not so deep as a well nor so wide as a church door, 'tis enough, 'twill serve; the Senate is peppered we warrant, for this world; it is a grave man and its funeral will follow as surely, if not as quickly, as Mercutio's.

THE ULTRA-MICROSCOPE.

ONE of the methods whereby it has been attempted to demonstrate objects which are too small to be visible under the ordinary microscope is based on the principle of dark-ground illumination. If a narrow beam of light is allowed to pass into a dark room, an observer with his line of vision at right angles to this beam can see the minute particles of dust which are illuminated, because his eye receives some of the rays of light which are diffracted from these luminous points, and is not confused by the diffusion of light from other sources. Similarly, if minute objects under the microscope are illuminated obliquely by a strong light which is not allowed to pass directly into the microscope, the objects in the microscopic field will appear luminous upon a black ground. Dr. Comandon, in a recent essay on the clinical use of the ultra-microscope,[1] endeavours to show that this method of examination may be applied with advantage to ordinary clinical material, as well as for the purpose of detecting extremely minute objects. Dispensing with the artificial effects produced by the fixing and staining of specimens, it provides a means for the direct observation of cells and micro-organisms in the living state. The author has used it

[1] *De l'usage en clinique de l'ultra-microscope; en particulier pour la recherche et l'étude des spirochètes.* Par le Dr. J. Comandon. Paris: G. Steinheil. 1909. (Roy. 8vo, pp. 174, with illustrations.)

in particular for the study of the syphilitic spirochaete, and declares that it imparts valuable information as to the exact morphology, movements, and biological characteristics of this organism. He thinks the method is suitable for general application in the study and identification of bacteria and other parasites, and also for investigations on the structure of cells *in vivo*. We admire the author's enthusiasm and appreciate his patient mastery of the difficult technique which is evidently to be grappled with before one can obtain satisfactory results with the "ultra-microscope." It would be most unwise to disparage any attempts to open out a new line of research, but at present the author's opinion about the value of his results appears to be unduly sanguine. Given a sufficiently powerful light, the "ultra-microscope" may be able to reveal objects which are too minute to be visible with ordinary methods, but it is difficult to understand how it can give accurate definition; and it therefore remains to be proved that in dealing with spirochaetes and other structures, which, though small, are not "ultra-visible," the dark-ground illumination of unstained material will add to our knowledge of structural detail.

THE ACTION OF SUN BATHS.

The idea that it is unnatural to protect the body from the full effect of the sun's rays by clothes has led certain persons, more especially in Germany, to advocate sun baths as a therapeutic measure. Grawitz, while recognizing that exercise in the open air is useful and healthy, has recently given some account of the injurious effect of outdoor sports and "nature healing," which involve excessive exposure of the unclothed body to the sun.[1] No scientific proof that sunlight has a specific beneficial action on the organism has, he maintains, been brought forward, while polar expeditions have demonstrated that adults can remain absolutely healthy for months even if sunlight is totally excluded. Direct exposure to sunlight, as is the case with other sources of heat, causes increased perspiration, and at times increased metabolism. But it has been shown that harmful effects are produced if the exposure is continued for more than an hour at a time, and if the head is uncovered. Grawitz states that he has seen a number of persons who have suffered from the damaging effects of prolonged exposure to sunlight, associated with the taking of the various forms of so-called "open-air" baths. In these cases the persons bathe first, then lie for a time on the sandy banks of the river or lake, then go into the water again, and so on for many hours. The chief symptoms produced by this sun bath are irregularity and acceleration of the heart-beat, systolic murmurs, increase of the cardiac dullness towards the right, high tension pulse, accentuated second sounds, and occasionally collapse. In a few cases the temperature was raised. In addition to those symptoms affecting the circulatory system, he mentions others indicative of increased irritability of the nervous system, often affecting strong and otherwise healthy persons. In some cases the symptoms were so severe that the relatives were alarmed. Grawitz stated that children frequently exhibit similar nervous symptoms when exposed to the effect of the sun on the beach at the seaside. Although they look sunburnt and otherwise well, they often present nervous symptoms which show that the change has done more harm than good. He suggests that children should not be allowed to be in the sun between midday and 4 p.m., but should play in woods or sheltered places during these hours. With regard to the treatment, he advises cold applications to the head and to the cardiac region, cold drinks, and in severe cases analeptics.

[1] *Deut. med. Woch.*, August 18th, 1909.

THE HEALTH OF ARMIES.

The eighteenth annual meeting of the Association of Military Surgeons of the United States was, we learn from the *Boston Medical and Surgical Journal*, held recently in Washington. Representatives from eleven foreign countries were present. In his annual address, Surgeon-General Rixey recommended that an increase of authority should be granted to medical officers of the army and navy, and dwelt on the necessity of more efficient organization and co-ordination of State and national medical departments. During the meeting attention was called to a recent article in the *British Annual*, presenting a statistical comparison of the health of various national armies, based on the relative percentage of admissions to military hospitals. In the United States the annual number of admissions is 1,250 per 1,000; in France, Germany, and Austria, over 600; in England, only 324. The high American rate is partly explained by the fact that the figure includes all soldiers excused from any part of their duty for medical reasons, whether they are admitted to hospital or not. Tabulation of the relative prevalence of various diseases shows that the incidence of venereal disease is 178.72 per 1,000 in the United States army, 81.8 in the British, and only 19.8 in the German. The reason for this is alleged to be the greater personal freedom and the higher pay given to American and English soldiers. The following is the order of frequency of tuberculosis in the armies: France, the United States, England, Russia, Germany, Austria. Cardiac disease is commonest in the British Army. The total peace death-rate in the United States Army is 6.14 per 1,000, that of Great Britain and France about half as much.

MOUTH-WASHES.

R. Bassenge has tested the antiseptic power of the mouth-washes most widely advertised.[1] He points out that the claims made for these washes must be regarded with suspicion, in face of the fact that solutions of mercury perchloride in concentrations of from 0.5 to 1 per 1,000 fail to produce even temporary sterilization of the oral cavity. For the purposes of his experiments he chose those easily killed bacteria which are at times found in water and which form the chief dangers to the human race—that is, cholera, typhoid, paratyphoid, dysentery, and diphtheria—and selected ten widely advertized mouth-washes. A glass of tap water (that is, 200 c.cm.) which had been previously sterilized was infected with a broth culture of the various bacteria. First a control subculture on ordinary sterile peptone broth was made. Then the measured quantity of the mouth-wash to be tested was added, and subcultures were made after the lapse of varying periods, partly on agar plates and partly in broth. He does not state whether any attempt was made to neutralize the disinfectant before making the subculture, and in the absence of any such statement it must be presumed that this was not done. The mouth-washes were allowed to act on the bacteria at the room temperature (59° F.), and at that of warm water (95° F.). No indication is given of the antiseptic supposed to be contained in the washes, save in the one case of perhydrol, which, as is well known, is a 30 per cent. solution of H_2O_2. This solution was employed in a concentration of 33 per cent., so that we may assume that the glass of water contained 10 per cent. of pure

[1] *Deutsche medizinische Wochenschrift*, August 19th, 1909.

hydrogen peroxide. The dilution of this in inoculating broth subcultures would be such as would exclude any inhibitory action of the oxidizing agent. But in the other cases this may not have been so. An inhibitory action is possible when a mere trace of some of the antiseptics, such as mercuric chloride, is present. The following mouth-washes failed to kill typhoid bacilli at 95° F. within five minutes in the concentrations prescribed by the manufacturers: *Desnos*, *Kothe's tooth water*, *Odol*, *Ozonodont*, *Eau de Botot*, *Eau de Pierre*, and *Listerine*. *Kosmodont* killed the typhoid bacilli in three minutes, but failed to destroy cholera bacilli in the same time. *Stomatol*, it is stated, killed the typhoid bacilli in two minutes at 95° F. At room temperature the action was still less effective. Only perhydrol acted antiseptically within four minutes, this agent killing all germs within a few seconds in the concentration mentioned above. From this it will be seen that, with the exception of the hydrogen peroxide preparation, which is not a true mouth-wash in the sense of the manufacturers, but is a well-characterized chemical substance, the action of which is known, the mixture of the advertised mouth-washes in a glass of water in the concentrations advertized must fail to kill dangerous pathogenic bacteria within four minutes, a space of time which would be longer than a person usually allows the water to be used for brushing his teeth to stand. If the bacteria are introduced into the mouth together with the mouth-wash, a further dilution will certainly take place, and even if the increased temperature favours the action of the mouth-wash, the bacteria would have a good chance of remaining alive. The water is rarely, if ever, kept in the mouth for five minutes, so that the results of Bassenge's investigations, so far as they go, would appear to justify the conclusion that mouth-washes can be of little use as disinfectants.

MALARIA IN ITALY.

THE recently founded Italian national league against malaria held its first meeting on October 6th at Milan under the presidency of Professor Baccelli. Senator Golgi, as chairman of the local organizing committee, delivered the opening address, in which he referred to the vast improvement due to the law of compulsory supply of quinine to labourers; in a few years the mortality from the disease had diminished by three-fourths. As regards agricultural and water-supply betterments, he recognized that so far the results had not been very encouraging; he hoped, however, that the laws made on the subject would not continue to remain a dead letter. In regard to human beings, the improvement was beyond all question. Where the measures were carried out rigorously, it had been shown by Negri that the disease disappeared so completely that not a single case was to be found in the following year. Golgi did not, however, think that the general adoption of prophylaxis by the systematic administration of quinine to healthy people was justified. On the other hand, mechanical prophylaxis by the use of mosquito netting on the doors and windows of dwellings gave satisfactory results. The efforts of the league should, he urged, be directed to the application and perfecting of the methods already known, and to the study of new means of combating the disease. Professor Baccelli, who next spoke, suggested that a national, or even an international, congress against malaria should be held in Rome in 1911. Then the league would have the opportunity of demonstrating publicly the work it had done up to that time. He announced that the Government would hand over for the purposes of the league the profits made on the sale of quinine by the State. The Central Committee was then constituted as follows: Professor Baccelli, President; Professor Golgi, Professor Lustig, Professor Gosio, Dr. Picchi, Professor Gobbi, Professor Di Mattei, Professor Canalis, Senator Ponti, and Signori Badaloni, Villaresi, and Cabrini.

INTERNATIONAL HYGIENE EXHIBITION.

AN International Hygiene Exhibition is to be held at Dresden in 1911. Dresden was chosen on account of its exceptional experience in holding exhibitions, its central position in Europe, and the adequate accommodation for such an undertaking which it possesses. The exhibition grounds and palace have been placed at the disposal of the organizers of the congress, but when it was found that even the extensive grounds of the former would not suffice for the purpose, the King graciously consented to throw in a portion of the royal garden. The Government promised a considerable sum of money, the town followed suit, and a subscription list in the neighbourhood soon produced about one million marks. The exhibition will be under the patronage of the King of Saxony. Among the honorary presidents are His Excellency von Bethmann-Hollweg, Count von Buelow, and the Burgomaster, Dr. Beutler; the honorary committee contains the names of a large number of well-known ministers, diplomatists, and scientists. A general board of management has been constituted and a small working committee appointed from it. The scientific management has been entrusted to Dr. Weber, of the Kaiserlichen Gesundheitsamt, while the sectional committee is composed of Drs. Ingelfinger, Luerssen, Mallwitz, Neustätter, Roesle, and Xylander. The aims of the exhibition are to place before the expert hygienist, including medical men, officials attached to town and county councils, Government officials, school teachers, engineers, and political economists, all the latest achievements of hygiene, and to enlighten the public and indirectly to awaken an active interest in the public mind for all matters connected with the protection of health. The exhibition will be divided into twelve groups and five special groups, as well as a department for exhibits dealing with the historical development of hygiene. The groups are as follows: (1) Light, air, soil, and water; (2) housing, dwellings, and settlements; (3) nutrition and foodstuffs; (4) clothing and care of the body; (5) occupation; (6) infectious diseases; (7) sick nursing and ambulance work; (8) the care of infants, of school children, and of young persons; (9) traffic; (10) military and naval; (11) tropical hygiene; (12) statistical. Special groups will deal with (*a*) tuberculosis, (*b*) alcoholism, (*c*) venereal diseases, (*d*) cancer, and (*e*) diseases of the teeth. The presidents of the individual groups will be Germans of reputation, while scientists of all other nations will be invited to act as vice-presidents and as members of the group committees. Each country will be invited to be represented by national committees, the choice of the members of such committees being made centrally in Dresden. We are informed that an invitation to a number of leaders in the various branches of hygiene in England to form a British committee will shortly be issued.

A MEETING of friends and former pupils of the late Professor D. J. Cunningham will be held (by permission of the Provost) in the Medical School, Trinity College, Dublin, on Wednesday next, at 4.30 p.m., to take steps to establish in the school a memorial of his connexion with Dublin University.

Medical Notes in Parliament.

[FROM OUR LOBBY CORRESPONDENT.]

Reports of Royal Commission on Vivisection.—On Tuesday the Home Secretary stated, in answer to a question by Sir Walter Foster, that he understood that a draft of the report was in an advanced state of preparation, but he was unable as yet to say when it would be presented.

Asylum Officers Superannuation Bill.—The Lords considered this Bill in Committee on Monday, when Lord Donoughmore moved two amendments to provide that established officers and servants should be divided into two classes for the purposes of superannuation. He moved in the interests of the London County Council officers connected with their asylums, many of whom he thought would not come within the scope of the bill. Lord Monk Bretton and Lord Clifford opposed, and Lord Beauchamp said he thought a large number of the persons referred to were really included in the bill, and it was plain that any servant who was in contact with lunatics would come within the scheme. The amendments were then withdrawn. An amendment of Lord Monk Bretton was accepted to provide that the division of established officers and servants into classes should be made by the Visiting Committee of each asylum with the consent of the local authority. On Clause 2 Lord Belper moved to substitute 20 years for 15 as the qualifying period of service, and 55 instead of 50 years as the retiring age. The Archbishop of Canterbury and Lord Ashbourne opposed, and the Duke of Northumberland spoke strongly on the charge on the rates not having been properly stated. Lord Monk Bretton agreed to accept the amendments, and hoped the Government would not on that account condemn the bill. The amendments were then made. An amendment providing for allowances to first-class officers during incapacity was accepted. A proposal to make the scheme as regards second-class officers adoptive was rejected, and then a new subsection was inserted providing for grants or allowances to persons injured in the discharge of their duty. A small amendment was made in Clause 6 by substituting three years for five, and an amendment was made by Lord Belper to Clause 14. A new clause enabling service in a Poor Law asylum to count for pension was then carried, and after some other small changes had been made the bill was reported to the House.

Poor Law Midwifery Orders.—Last week Mr. Henry Walker asked the President of the Local Government Board whether he had sanctioned the rules of some boards of guardians restricting midwifery orders to mothers who had already not less than a specified number of children; and, if not, whether he would express his official disapproval to the boards which had embodied this restrictive provision in their rules. Mr. Burns said the reply to the first part of the question was in the negative. He was aware that in the Minority Report of the Royal Commission on the Poor Laws and Relief of Distress attention was drawn to the rules of certain boards of guardians restricting the grant of midwifery orders to mothers with a prescribed number of children. He had made inquiry on the subject, and he found that in some of the cases cited the rule was seldom or never acted upon, whilst in others it did not apply if the relief was given by way of loan. He was still giving attention to the matter.

The Naval Medical Service.—Dr. Rutherford asked the First Lord of the Admiralty last week whether his attention had been called to the acquittal of Fleet Surgeon Charles Matthew by court-martial on a charge of behaving with contempt towards Commander Richard Walters, and also to the fact that Fleet Surgeon Matthew was placed on the retired list at his own request on account of the charge; whether Commander Walters had retired; and what steps he was taking, in the interests of efficiency in the navy, to remove the alleged grievances of the naval medical service. Mr. McKenna replied that Fleet Surgeon Matthew had been placed on the retired list at his own request; Commander Walters had not retired. He should be glad if his hon. friend would direct his attention to the alleged grievances referred to in the last part of his question. Dr. Rutherford then asked whether a Commission was appointed to inquire into these alleged grievances, and if so, had it reported. Mr. McKenna answered that a Committee was appointed to inquire into certain circumstances affecting the medical service in the navy, but he would not describe them as grievances.

Feeding Suffragettes in Prison.—In answer to Mr. Snowden, Mr. Gladstone said some of the Suffragettes were received at Newcastle Gaol on October 9th and others on the following Monday. Lady Constance Lytton and Mrs. Brailsford were received on Monday and were discharged on Wednesday, and on that day it became necessary to feed some of the others. All the prisoners (eleven in number) were medically examined with the utmost care. Four of them were found to be suffering from heart disease. The four were released on the recommendation of the medical officer. "I need hardly say," he said, "there is not the slightest ground for the insinuation that Lady Constance Lytton was released because she was a peer's sister. She was released solely on medical grounds." The medical examination was made before they were forcibly fed. In answer to Mr. Keir Hardie, Mr. Gladstone said that he understood that Mrs. Leigh was still being forcibly fed in Birmingham prison.

The Oaths Bill.—This bill was in Committee in the Upper House on Monday last, and on Clause 2, dealing with the administration of the oath, an amendment was agreed to, on the motion of Earl Beauchamp, describing the following form for administering an oath: "The person taking the oath shall hold the New Testament in his uplifted hand and shall say, or repeat after the officer administering the oath, the words, 'I swear by Almighty God' . . . followed by the words of the oath prescribed by law." A proviso was also inserted that in the case of a person who is not a Christian the oath shall be administered as nearly as may be in the same form, "but with such modification of the words or ceremony as may make the same conformable to the religious faith, or binding on the conscience of such person." Clause 4 was amended so as to provide that the bill shall come into operation on January 1st, 1910, instead of this year. The bill was afterwards reported with amendments to the House. On the report stage on Tuesday Lord Alverstone amended the bill so as to provide that an oath shall be administered to a non-Christian witness "in any manner which is now lawful."

Care of Feeble-Minded (Royal Commission).—Mr. Henry Walker asked whether any legislation was being prepared to give effect to the recommendations of the Royal Commission on the Care and Control of the Feeble-minded, with particular reference to the removal of mentally-defective persons from the workhouses. Mr. Burns replied that the initiation of legislation affecting the methods of dealing with mentally-defective persons in public institutions would not be a matter primarily for his department; but the recommendations of the Royal Commission on the particular matter referred to in the question would not be lost sight of when any such legislation was proposed.

Carbon Monoxide Poisoning.—Mr. George Roberts asked the Secretary of State for the Home Department if his attention had been directed to a disease affecting certain workers in the printing trade known as carbon monoxide poisoning, arising from the fumes of a gas now being largely used in heating the metal pots attached to linotype composing machines; and whether he would cause an inquiry to be made with a view to the disease being scheduled as an industrial

disease under the Workmen's Compensation Act Mr. Gladstone replied that he had made inquiry into the case, and the reports would appear to show that it was a case of gradual poisoning by carbon monoxide. Such cases were extremely rare, and no other case of the kind in connexion with linotype work was known to the Department. Poisoning by carbon monoxide was, of course, not uncommon, but it was almost invariably more or less sudden, and of the nature of an accident, so as to come clearly under the main provisions of the Workmen's Compensation Act. The question of scheduling carbon monoxide poisoning as a disease was considered by the Industrial Diseases Committee, but they were unable to regard the evidence as sufficient to justify their recommending its inclusion. In view, however, of the present case, he would give instructions for the matter to be carefully watched by the officers of the Department. Mr. Lupton, in a supplementary question, pointed out that gas companies had of late years introduced carbonic monoxide into their gas in much larger proportions, and that a leakage might cause the poisoning.

Vaccination Act (1907) Declarations.—Mr. Lupton asked the President of the Local Government Board if he would state for what proportion of the births occurring from January 1st to June 30th, 1909, were declarations made under the Vaccination Act, 1907; and how many declarations were actually made during that period. Mr. Burns answered that the number of births in England and Wales registered in the first two quarters of 1909 was 466,216. It could not at present be stated in respect of how many of these children statutory declarations of conscientious objection to vaccination had been made. The number of declarations received by the vaccination officers during the first six months of the present year might be stated approximately as 88,500.

Hospital Accommodation for Rosyth.—Major Anstruther-Gray asked the First Lord of the Admiralty what hospital accommodation had been installed at Rosyth, and how far would victims of an accident at the new dockyard works have to be carried before receiving treatment in hospital, and what provisions had been made for transport thereto. Mr. McKenna said that no hospital accommodation had yet been installed at Rosyth. Injured men requiring hospital treatment were conveyed about three miles and a half to Dunfermline Hospital. The contractors had arranged for the use of the St. Andrews Association's ambulance wagon, which was kept in Dunfermline. This could be summoned by telephone and arrive on the site in twenty-five or thirty minutes. Less serious cases could be transported by the contractors' motor car in fifteen minutes. In answer to supplementary questions, Mr. McKenna said the matter was one for the contractors who employed the labour. There were 575 men now employed at Rosyth, and in March next there would probably be 2,000. [We understand that the contractors intend to erect a works hospital at or near Rosyth.]

Poisonous and Inflammable Hair-washes.—Sir William Collins asked the Secretary of State for the Home Department whether he proposed to take any action with a view to restrict or prevent the use of substances for shampooing the hair which by reason of their poisonous or inflammable qualities were liable to cause serious injury or fatal results. Dr. Rutherford also asked whether, in view of the recent further deaths which had taken place in the metropolis from the use of inflammable hair-washes, he could hold out any hope of the introduction of legislation next session for the purpose of prohibiting the use of such preparations. Mr. Gladstone said that the matter was receiving serious attention, and the question whether legislation ought to be undertaken would be fully considered. In the meantime, he might point out that, as intimated by counsel in the recent proceedings at Westminster Police-court, the Director of Public Prosecutions would certainly prosecute for manslaughter if tetrachloride should again be used and a fatal result ensue. The inquest in the recent case of two deaths arising from the use of petrol was not yet concluded; but when the inquest was completed the question of prosecution would be considered by the Director of Public Prosecutions.

Meat Supply and Examination of Carcasses.—On Monday last Mr. Keir Hardie asked the Board of Agriculture whether, with a view to the more effectual protection of the public health, he would consider the desirability of making it compulsory upon all owners of live stock commonly used or sold for the food of man to notify the local authority within twenty-four hours of any ailing, injured, or apparently diseased animal, in order to prevent such animal being offered upon his premises, or removed therefrom, for the purpose of sale until the carcass of such animal had been duly examined by a qualified veterinary surgeon, and that the penalty for contravention of any such amended Act should be made sufficiently heavy to prevent the foisting of anything unfit or unsound upon those who were responsible for the distribution of the meat supply of the United Kingdom. Mr. Burns, who replied, said that he would take note of the suggestion, but he could not promise to introduce legislation for the purpose of giving effect to it. There would, he thought, be a good deal of difficulty in the matter.

Civil Medical Departments (India).—Mr. Rees asked whether Eurasian military assistant surgeons lent to civil and medical departments in India were not generally statutory natives of India, and in that case equally qualified with natives of India proper for all and sundry appointments reserved for natives of India; and whether natives of India, Europeans, and Eurasians were as such in any way disqualified from employment in the Civil Medical Department. The Master of Elibank said that the reply to the first question was in the affirmative. Indians were equally eligible with Europeans for admission to the Indian Medical Service, which service contained many Indian members. As to the Civil Medical Department, he begged to refer to the papers recently presented to Parliament.

Medical Appointments (India).—Mr. Hazleton asked the Under Secretary of State for India whether the India Office had received a resolution unanimously adopted at a meeting of the members of the medical profession, held under the auspices of the Bombay Medical Union, submitting that the present system of reserving all high and important posts in the medical service of India for military officers of the Indian Medical Service had led to the systematic exclusion of Indian doctors from them, no matter how highly qualified or deserving those Indian doctors might be; whether he was aware that the system in question had given rise to discontent and imposed unnecessary expense of over £100,000 on the Indian revenue; and what steps it was proposed to take in the matter. The Master of Elibank replied that the Secretary of State had not received the resolution referred to; on the general subject, he would refer to the correspondence recently presented to Parliament as to the steps that were being taken to promote the growth of an independent medical profession in India by throwing open to the profession in general some of the various civil appointments now held by officers of the Indian Medical Service, and other similar appointments that might be created in future.

The Housing Bill.—The consideration of the Lords' amendments by the Commons has been postponed till Monday next.

Holidays for Lords and Commons.—The House of Lords, at the conclusion of its sitting on Tuesday, adjourned till Monday, November 8th, and on Wednesday the Prime Minister announced that on November 5th the House of Commons would adjourn till November 23rd. The Development Bill, he stated, would be considered after November 23rd.

England and Wales.

[From Our Special Correspondents.]

SHEFFIELD.

Appointments.

Several changes have taken place recently in the *personnel* of the staffs of the Royal Infirmary, the Royal Hospital, and the Medical Faculty of the University. The lectureship on ophthalmology and the post of honorary ophthalmic surgeon to the Royal Infirmary, rendered vacant by the death of Dr. Simeon Snell, have been bestowed on Mr. George Henry Pooley, late of St. George's Hospital. At the Royal Hospital Mr. George Wilkinson has been elected to the newly created office of honorary aural surgeon, vacating his post on the general surgical staff, which in future will comprise two surgeons and two assistant surgeons. The rearranged staff has been completed by the election of Mr. F. A. Hadley as an assistant surgeon. Dr. Archibald Young has resigned the office of assistant physician, and is succeeded by Dr. H. G. M. Henry. Mr. A. M. Connell has relinquished the lectureship on operative surgery for that on practical surgery.

New Surgical Block, Royal Infirmary.

The ever-increasing demand for additional accommodation has compelled the boards of the infirmary and the hospital to add to their existing buildings. At the Royal Infirmary a new surgical block, comprising 180 beds with operation theatres, is in course of erection, and will be ready for occupation next summer. The building has been designed by Messrs. Gibbs and Flocton of Sheffield. It consists of three stories, each of which comprises two large wards of 28 beds and four small isolation wards, with the usual complement of ward kitchens, store rooms, clinical room, etc. The principal wards measure 112 ft. in length by 26 ft. in width. The operation theatres are situated over the central portion of the building, and on either side flat roofs will provide abundant space for patients who require outdoor life. It is an ill wind that blows nobody any good, and the unusual depression in the building trade has enabled the infirmary board to secure low-priced tenders, and it is confidently hoped that the entire cost of the block will amount to less than £200 a bed.

Additions to the Royal Hospital.

The rebuilding of the Royal Hospital, which was commenced nearly twenty years ago, is still incomplete. The Board is at present engaged in the erection of ophthalmic wards and a suite of operation theatres. Additional wards and an extension of the nurses' house are urgently needed, and will be taken in hand as soon as the necessary capital is forthcoming.

The organization of the Third Northern General Territorial Hospital is almost completed, and at an early date the nurses will be presented by the Lady Mayoress with their badges.

Scholarships.

The joint clinical committee has very generously offered two entrance scholarships in medicine of the value of 150 and 50 guineas respectively, and an anonymous donor has offered one of 100 guineas to women students of medicine.

WEST YORKSHIRE.

After-care of Sanatorium Patients.

For the last two years the phthisical cases coming to the knowledge of the Bradford Board of Guardians have been notified to the City Guild of Help for friendly visitation and after-care. The report of the work during the two years ended October 1st, 1909, has recently been presented. Of 169 cases discharged after treatment at the sanatoriums 71 have been classed as satisfactory and 31 are still being visited. Of the remainder 11 have died, 11 have entered the union hospital, and others were not taken up for other reasons, such as being outside of the union area. The report observes that in a great many cases the value of after-care is manifest at once. Patients have been advised to sleep in separate beds, and, if possible, in separate bedrooms with the windows wide open, to be in the fresh air as much as possible, whilst in some cases outside employment has been found for them, such as insurance canvassing and hawking. The report observes: "The after-care of consumptives is extremely difficult and disheartening work for untrained voluntary workers, and in view of this the results obtained are extraordinarily satisfactory." The Guild of Help also visited 60 cases which had been notified as being unsuitable for sanatorium treatment, and regarding them the report states: "The work here is preventative, and much has to be done to help the families of the patients to avoid risk of infection."

MANCHESTER AND DISTRICT.

State Insurance and the Friendly Societies.

At the annual meeting of the Lancashire and Cheshire Union of the National Independent Order of Oddfellows held at Bury, Lancashire, last week, the President made some remarks on the Government scheme of State insurance which are of interest in relation to the provident dispensary scheme of the Royal Commission on the Poor Laws. He expressed the opinion that the officials of the Friendly Societies' Conference had been well advised in meeting the Chancellor of the Exchequer to discuss the question of State insurance, and he understood that they had a virtual assurance that the Government would not proceed with legislation on the subject until a full scheme had been laid before the various friendly societies. It was much easier to gain reasonable concessions by friendly negotiations before a bill was drafted than when it was before the House of Commons. As an example of this, he said that if the leading friendly societies had not absolutely refused to discuss the grant of old age pensions except on their own terms, the Act would have been more favourable to the friendly societies than it was. He thought that compulsory insurance would be not only necessary but beneficial in some cases, both to the individual and to the community, and the friendly societies ought to support any reasonable scheme which would compel people to make provision against the inevitable time of sickness and adversity. The large number of lapses that occurred in the societies every year would become a thing of the past under a system of compulsory insurance. An announcement had been made which, if it had any meaning at all, undoubtedly meant that the projected State insurance was to be worked through and in co-operation with the registered friendly societies. This recognition of the sound friendly societies would practically drive people into their societies.

There can be little doubt that the President is correct in his anticipation that State insurance worked through friendly societies would drive people into the societies, and the opinion has been expressed in Manchester that the direct result of that would be to cause a great extension of a sort of medical club practice that is by no means satisfactory to the profession. There would also be some damage done to the provident dispensaries organized by Divisions of the British Medical Association, so much so, in fact, that they would have little or no chance unless there were a refusal of medical practitioners to work for the friendly societies. Such a refusal is not at all impossible in certain places unless some better terms and conditions are granted by the friendly societies to their medical officers, and for their own sakes the societies would be well advised to come to an agreement on some outstanding grievances without further delay. To get a scheme of State insurance passed by the legislature and then to find that the medical part

of it was unworkable from a refusal of self-respecting medical men to act as medical officers would largely counterbalance any advantage the scheme might bring to the societies. The assistance of medical men is absolutely necessary to make any scheme efficient, and it is felt in Manchester that there is every reason why the Government should consult the medical profession as well as the friendly societies—at any rate, on some details which so seriously affect the profession.

The far-reaching effects of insurance against sickness and accident were well brought out by Sir Lees Knowles at the annual meeting of the governors and subscribers to the Salford Royal Hospital. He had been alluding to the fact that the hospital was still in need of about £28,000 towards the building fund, and that the expenditure for the year had exceeded the income by £364, which would have to be taken from investments, and he mentioned that in Germany there were several forms of insurance. Insurances against sickness were paid two-thirds by the workman and one-third by the employer, and insurances against accident were paid by the employer. In several State hospitals which he visited he found that those patients who were privately insured were able to obtain private rooms in the hospital, for which they paid, during the winter, first class 4s. 5d., second class 2s. 4d., and third class 1s. 8d. a day, and slightly less in the summer. Private individuals not so insured were charged for private rooms first class 7s., second class 4s. 6d., and third class 4s. per day. The cost of each patient in the large wards was about 3s. per day, and payment for ordinary patients was made by employer and employed by means of insurance, and when there was a deficit it was wholly or partly made up by the State. Sir Lees Knowles thought that possibly in the future if the hospital could not raise funds such a scheme would come to their assistance. The question may be asked why, if direct payment for services rendered by hospitals can be thus arranged by insurance, the method might not be extended to private medical attendance. The result could hardly be worse than much of the club practice of to-day.

The Break-up of the Poor Law.

A meeting was held last week at the Onward Buildings, Manchester, to inaugurate a local branch of the National Committee to Promote the Break-up of the Poor Law. The meeting had been advertised in the *Manchester Guardian* and the *Evening News*, and in the latter advertisement it was stated that the meeting was a public meeting and for discussion. Attracted by this, a solitary medical man went who had an idea that there are good points in both reports. About sixty persons were present, half being ladies. The Chairman began by finding fault with the title of the society, on the ground that "break-up of the Poor Law" did not suggest any constructive policy such as was in the minds of its founders. He approved of the object of the National Committee, but thought that some provision should be made to retain the services of the present members of Poor Law bodies. Mr. Colegate, the Organizing Secretary of the National Committee, in a long address, explained the main features of the Minority Report, and contrasted it with what he called the "antidemocratic" Majority Report. Apparently the solitary medical man had not been convinced that the Minority scheme was the panacea that it had been represented, and he essayed to address the meeting. No sooner had he appealed to the meeting to take the best points of both reports and not to be led away by the speech of the Organizing Secretary, which showed a woful ignorance of the Majority Report, than an attempt was made to stop him speaking. It then turned out that most, if not all, of the rest of the audience had been summoned by circular, a copy of which was shown, and that no discussion of the report was intended. It was strongly denied by the convener of the meeting that there had been any advertisement announcing a discussion, or, if there had, he asserted that it was without authority, and the medical man, not having a paper with him, could not prove it at the time. The Chairman, however, allowed him to conclude his remarks, which, of course, in such a meeting were ineffectual. A local committee was then elected to commence propagandism in favour of the Minority Report. The meeting was held at the Onward Buildings, Deansgate, on Wednesday, the 20th, and on that day the *Evening News* had in its first column the following advertisement:

> League of Progressive Thought and Social Service, Onward Buildings, 207, Deansgate, To-night. Subject: "Break-up of the Poor Laws." Public Meeting. Discussion.

LEEDS.

Medical Leeds Fifty Years Ago.

On October 19th Sir Clifford Allbutt opened a new nurses' home and new operating rooms in the infirmary at Dewsbury, the town of his birth. In a speech delivered on the occasion Sir Clifford Allbutt said the operating theatre he had just seen had not, of course, cost a tithe of the nurses' home, but he thought its significance was equally great. When he looked back upon the colleagues who were in practice in Yorkshire in the old days, and even when he looked on the men who were practising in Yorkshire now, he could not but feel that shrewd common sense, resourcefulness, kindness of heart, and sympathy were the qualities which really made the practitioner in those times, and he trusted that no practitioner of the present time was without them. But a radical change has passed over the medical profession. Now personal shrewdness, common sense, and kindliness were only a portion of the necessary equipment of the scientific professor of medicine. Such an operating theatre fifty years ago would have been received with shouts of laughter and would have been regarded as absurd by theoretical persons. And yet it had now become vital in practice. It had been learnt that upon minute detail might depend the issue of human life, and upon the very smallest precaution. In the time he was speaking of infectious disease came and swept the people off. When he was at the Leeds Fever Hospital the house was always full, and possibly the corridors as well, with malignant forms of disease which were never seen now. Scarlet fever was quite a plague, whereas it was now so lightly regarded that very often it scarcely needed medical advice at all. The malignancy of such diseases had been enormously reduced by the general improvement of the sanitary conditions of the country by a deliberate preventive system of medicine. The operating room was a symbol of the profound change which had come about. In the days he referred to at the fever hospital he remembered there were two nurses for over eighty patients—one for the male and the other for the female sick. "They were," said Sir Clifford Allbutt, "great, powerful, red-faced women, who ate a great deal of beef and drank a great deal of beer, and they lifted the patients as you would lift puppy dogs. These two women ran the two wards. I should be the last person in the world to speak ill of them; they were certainly not overpaid, and they were overworked. At night there was a third person who had the whole hospital to look after—patients who were profoundly ill, suffering from typhus, typhoid fever, scarlet fever, and small-pox." But, as might be imagined, there was little real nursing. What a revolution had occurred! Nursing had become a profession. And how had it become one? Because there were now new principles of nursing, and it was plain that the life of a patient now often depended more upon the work of the nurse than upon the physician or the surgeon. Therefore, they felt that nursing had now become co-ordinated with their own profession. Sometimes in critical moments much would depend upon the doctor, but at other times the continual service of the case would depend upon the profession of nursing.

LONDON.

Lunacy in 1908.

The recently issued annual report[1] of the Asylums Committee of the London County Council for the year ended March 31st, 1909, containing the lunacy statistics for the year 1908, shows that on January 1st, 1908, the total number of insane persons chargeable to London rates, including criminal lunatics and private patients in the London County Asylums, was 26,170, and on January 1st, 1909, 26,848. The increase for the year of 678 may be compared with that of 403 for the year 1907 or with the average increase for the last nineteen years of 552. It should be mentioned that the term "private patients" refers to those who pay the bare pauper maintenance rate, or in the case of Manor Asylum 16s. 11d. a week, and who, if they were not thus classified, would have to be provided for as pauper patients.

Of the total number on January 1st, 1909, 19,716 were lunatics under reception orders, for whose accommodation the county was responsible; 6,763 were in Metropolitan Asylums Board Asylums, and 369 were in workhouses or with relatives or friends. During the year 1908 the lunatics under reception orders increased by 476, those under the Metropolitan Asylums Board by 230, and those in workhouses or with friends decreased by 28.

Considering only pauper lunatics chargeable to unions and parishes in the County of London or to the county rates, these numbered on January 1st, 1909, 26,293; on January 1st, 1908, 25,685; and on January 1st, 1907, 25,341. Regarding this increase the Asylums Committee still retain the opinion expressed in former reports, that much is due to a lessened death-rate and the accumulation of chronic cases and to a more comprehensive registration, and not to a greater prevalence of lunacy among the population.

A table furnished by the committee shows that the ratio of pauper lunatics in the county on January 1st, 1909, to estimated population was 5.62 per 1,000, as compared with 5.51 per 1,000 on January 1st, 1908, and 5.46 per 1,000 on January 1st, 1907. As regards the ratios to population of the several unions and parishes, we see that the Strand is, as usual, the highest, with 13.3 per 1,000; and Hampstead the lowest, with 2.6 per 1,000.

The increase in the total number of lunatics, the committee says, cannot be ignored, and it is pointed out that when the accommodation provided by the Metropolitan Asylums Board is full, or otherwise not available, patients who are suitable for the Asylums Board's care are sent to London County Asylums. Every London pauper lunatic certified for detention in a lunatic asylum adds to the number for which the county is responsible, the inability of the Asylums Board to admit patients directly to its asylums causing an increase in the county cases. This inability, it is stated, does not exist now, but the fact remains that in twenty years the chronic lunatics and imbeciles with the Metropolitan Asylums Board have increased only from 5,566 to 6,763, whereas the patients for whom the county is primarily responsible have increased from 10,104 to 19,716.

Accommodation.

The total accommodation in the London County Asylums on January 1st, 1909, was for 19,659; or, excluding that at Claybury Hall, for 19,595. At the date of this report all the contracts with out-county asylums for the reception of London patients had terminated, with the exception of one for 100 males at Ruberry Hill and one for 40 males at Hellingly. All the patients boarded out under other contracts have now been brought back to London asylums.

Admissions.

On January 1st, 1908, there were 18,832 patients on the registers of the London asylums, including the epileptic colony at Ewell, and on the last day of the year there were 19,440. The total cases under care during the year numbered 22,911, and the average daily numbers on the registers 19,254. During the year 4,079—1,920 males and 2,159 females—were admitted, being 1,219 less than the admissions of 1907 and 184 more than those of 1906. The average age was for the males 41.92 years, for the females 43.12, or for both together 42.55, as compared with 43.06 for 1907 or 41.47 for 1906. Last year 813 were of 60 years or over; this year there were only 586. As to civil state, 1,820 were single, 1,718 married, and the rest widowed.

Of the total admissions 3,613 were direct admissions and 466 transfers and statutory readmissions. The numbers of the direct admissions are said to have been fairly constant during the past seven years, but their value as a guide to the incidence of insanity has to be discounted by the fact that they depend partly on the amount of available accommodation. Now, however, that practically the whole of London's insane are housed in the county asylums, future statistics should afford an index to the fluctuations in London's occurring insanity. Last year the direct admissions numbered 3,558, so that there was an increase in this class of 55, whereas in the previous year there was a decrease of 23.

As to the duration of the disorder on admission and considering only the direct admissions, the attacks were first attacks within three months in 1,446 and in 476 more within twelve months of admission; not-first attacks within twelve months in 752; in 105 in whom it was unknown whether the attack was first attack or not the attacks also were within twelve months; in 64 the duration was unknown; 2 were not insane, and in the remaining 768, including 161 congenital cases, the attacks were of more than twelve months' duration on admission. Thus, of the total direct admissions, 2,440, or 67.6 per cent., were "first-attack" cases. It is pointed out in the report also that while 1,473 of the 3,450 direct admissions (excluding congenital cases) were removed to an asylum within one month of the onset of the insanity, no less than 508 had been mentally disordered for more than twelve months before admission to the asylum. It is further pointed out that as these 508 cases obviously did not belong to the occurring insanity of 1908, they to that extent vitiate the value of the statistics as evidence on this point. It would be interesting to know whether the proportion of such cases to the total direct admissions is or is not fairly constant, as in the former case the value of the evidence would not be seriously affected.

Turning to the forms of mental disorder, the direct admissions were classified as follows: Mania, recent 523, chronic 67, and recurrent 205; melancholia, recent 828, chronic 75, and recurrent 179; senile and secondary dementia 189, delusional insanity 433, general paralysis of the insane 334, insanity with epilepsy 195, confusional insanity 176, insanity with grosser brain lesions 80, primary dementia 59, stupor 25, alternating insanity 18, volitional insanity 27, moral insanity 8, acute delirium 6, not insane 2, and congenital or infantile defect, with epilepsy 62, without epilepsy 104, and moral imbecility 8. It will be noted that the general paralytics formed 9.2 per cent. of the total direct admissions, thus giving a proportion for London County almost half as great again as that for England and Wales.

Etiology.

With regard to the assigned etiological factors and associated conditions in the total direct admissions, alcohol was returned as principal cause in 402 and as contributory in 339 more, giving a total alcoholic causation in 741, or 20.5 per cent. Excluding, however, 481 cases in which no cause was assigned and the 2 not insane, alcohol figures as cause in 23.6 per cent. Acquired syphilis was assigned in 381, or 12.1 per cent., giving a combined proportion from these two causes of alcohol and syphilis, calculated on the direct admissions, after deducting those in which no cause was assigned, of 35.8 per cent. Among other toxic causes were: Influenza in 90, tuberculosis in 37, and specific fevers in 18.

[1] The Twentieth Annual Report of the Asylums Committee as to the London County Asylums, for the year ended March 31st, 1909. P. S. King and Son, Westminster, S.W. Price, 2s.

Critical periods were assigned in 677, child-bearing in 117, diseases of the nervous system (including epilepsy in 212) in 375, other bodily affections (including cardio-vascular degeneration in 312) in 555, bodily trauma in 160, and mental stress in 999. An insane heredity was ascertained in 795, or 22.0 per cent., an alcoholic heredity in 275, an epileptic heredity in 118 and of neuroses and marked eccentricity in 54, giving a total neuropathic heredity in 1,242, or 34.3 per cent. of the total direct admissions. The special table with reference to the general paralytics admitted shows that the commencement of the illness fell in the largest number in the age period 35 to 44; the next largest number between 45 and 54, and the next largest between 25 and 34. Positive evidences of previous syphilitic infection were found in 192 out of 333 general paralytics, or in 57.6 per cent. The proportions at the several asylums vary extremely, ranging from 90 per cent. in one asylum to 28 per cent. in another. An interesting fact is that of the 192 paralytics offering definite signs of syphilis 142 were married and 10 widowed.

Readmissions.

The committee furnish the usual returns of the number of patients readmitted to the London County Asylums. These show that during the fourteen years ended December 31st, 1908, 16,572 patients had been discharged as recovered, of whom, up to March 31st, 1908, 4,678, or 28.22 per cent., had been readmitted. Further, they show that 1,999 of these, or 12.06 per cent., had to be readmitted within twelve months of their discharge. Under existing conditions this is unavoidable, and the committee says that it is awaiting anxiously the action to be taken on the recommendation of the Royal Commission on the Feeble-minded with regard to dealing with the present difficulties in this matter.

Discharges, Deaths, etc.

During the year 1,181 were discharged as recovered, giving a recovery-rate on the direct admissions of 32.68 per cent., or of recoveries in the direct admissions on the direct admissions of 31.16 per cent. The recovery-rate of 32.68 per cent. is the lowest recorded since 1893, when it was 31.78 per cent., and may be compared with the average for the last nineteen years of 37.52 per cent. Also 496 were discharged as relieved and 254 as not improved. During the year 1,540 died, giving a death-rate on the average numbers resident of 8.00 per cent. This is also the lowest death-rate for any year since 1890, since when the death-rates have been steadily declining. The deaths were due in 504 to diseases of the nervous system, including 323 deaths from general paralysis and 64 from epilepsy; in 257 to heart diseases; in 86 to diseases of blood vessels; in 62 to diseases of respiratory organs; in 31 to diseases of the digestive system; in 59 to diseases of the urinary system; in 5 to diseases of the ductless glands; in single cases to suppurative otitis, uterine fibroid, arthritis, mollities ossium, pemphigus, and debility; in 139 to senile decay, and in 5 to accident or violence. In the remaining 436 the deaths were due to general diseases, including 59 from lobar pneumonia, 51 from bronchopneumonia, 41 from carcinoma, 35 from dysentery, and 196, or 12.7 per cent. of the total deaths, from tuberculous diseases.

Cost.

The net weekly cost per head for patients maintained in London County Asylums (combined average) for the year ending March 31st, 1909, was 10s. 1.79d., as compared with 10s. 5.44d. for the preceding year.

The Pathologist's Report.

The report of Dr. Mott, Director of the Pathological Laboratory and Pathologist of the London County Asylums, contains an outline of the work carried out during the year. The routine work comprised systematic examinations made upon pathological material supplied from the several London asylums, also on blood, sputum for tuberculosis, swabs for diphtheria, blood and cerebral spinal fluid for lymphocyte and Wassermann reaction, and samples of urine for abnormal chemical and microscopical constituents. In addition a large amount of scientific investigation has been carried out by Dr. Mott and others working in the laboratory, the results having been published in the *Archives of Neurology and Psychiatry* and other publications.

As mentioned last year, Dr. Mott is engaged in an inquiry into the patients in the London asylums who are related to each other, with a view to discovering their chief clinical types of insanity, and, in the case of death, the convolution patterns of the brains. Dr. Mott has now obtained particulars of a large number of cases, but at the present stage he considers it would be unwise to give statistics. In time Dr. Mott hopes to collect a fairly complete list of what he terms the "insane families" under the care of the London County Council. The most common types of insanity among these cases are, he says, imbecility, dementia praecox, and manic-depressive insanity. There are also, however, cases of paranoia and epilepsy. Dr. Mott gives also the usual information as to tuberculosis and dysentery in the London asylums. Dr. Mott shows that, of the 19,424 patients resident in the asylums on March 31st, 1909, 394, or 2.03 per cent., were reported as tuberculous. Also during the year, 1,490 necropsies were made, and out of 225 of those reported as tuberculous, the diagnosis was confirmed in 168, or 84 per cent., the remaining cases showing either obsolescent disease only or no signs of phthisis. In addition, in 58 cases the presence of active pulmonary tuberculosis was ascertained for the first time at the autopsy. Of the total number of necropsies made, tuberculous lesions were found in 15.16 per cent.

With regard to dysentery, there were altogether 268 cases amongst the patients during the year ending February 28th, 1909, as compared with 242 during the previous twelve months. Although the total number of cases shows an increase on the previous year, the conditions of the asylums generally has continued to improve, the increase being due to the heavy returns from Long Grove Asylum (81 cases).

NORFOLK.

The Norfolk and Norwich Hospital.

On Monday last the King paid a visit to the Norfolk and Norwich Hospital at Norwich, and laid the foundation-stone of a new isolation and septic block, which is the first of the series of extensions the governors of this hospital now have under contemplation. His Majesty was received at the hospital by the President, the Earl of Leicester, G.C.V.O., C.M.G., and by the Bishop of Thetford, in the absence through illness of the Vice-President, the Lord Bishop of Norwich. A few presentations were made to His Majesty, including Sir Peter Eade, the consulting physician; Dr. Michael Beverley and Mr. Haynes Robinson, the consulting surgeons; Dr. S. J. Barton, the senior physician; Mr. S. H. Burton, the senior surgeon; and Miss F. A. Cann, the matron.

An address was read to His Majesty by Lord Leicester, to which the King replied as follows:

I thank you for your loyal address of welcome which your lordship has presented to me from the governing body and friends of the Norfolk and Norwich Hospital. I well remember my visits to you in 1879 and 1884. The hospital is, and always will be, associated in my mind with the personality of the late Lord Leicester, a man whom, as you know, I held in the highest esteem and regard during the many years of my residence in your county. (Applause.) It was of great interest to me to hear the account of the good work performed by the hospital since its opening. I am glad to say that a want, long felt by the hospital authorities, and one which has in many cases hampered their efforts, has now been supplied, and it is a source of gratification to me to open to-day the extension of the hospital designed as an isolation block for the reception of such cases as cannot without risk of infection be allowed to associate with other patients. No greater blessings exist for the poor classes of the country than the institutions which provide for their relief and care in illness, and any movement to establish new buildings for the purpose of extending those already in existence, or to render them more efficient, will always have my warmest support. (Applause.) I am sure that those charitable men and women who have liberally contributed to your hospital in the past will themselves continue their support, and will by their

efforts stimulate others to assist this noble work of charity. The encouragement you give to your nurses to join the nursing service of the Territorial Forces meets with my utmost cordial approval. In matters of life and death the services of the trained nurse are no less essential than those of the physician or surgeon. I pray that the blessing of God may rest upon your labours.

A souvenir of the occasion was presented to those attending the ceremony by the Building Committee. In addition to portraits of the King and Queen, and the order of proceedings, it contained a short history of the hospital illustrated by a portrait of Mr. William Fellowes of Shottesham, to whose munificence the hospital mainly owed its origin, and by whom the foundation of the earliest building was laid in 1771; of Mr. Benjamin Gooch, the first consulting surgeon; of the Earl of Leicester, who started a special endowment fund, and altogether contributed nearly £58,000 for the purposes of the hospital; and of Mr. William Cadge, together with pictures of the building as it appeared in 1778, and as it now is.

Over £17,000 has already been subscribed towards the £50,000 required for the new buildings.

WALES.

Extension of Cardiff Infirmary.

On October 21st Mrs. John Nixon laid the foundation stone of the new wing of the Cardiff Infirmary. The chairman, Major-General Lee, invited donors to place gifts on the stone. Within half an hour some £9,127 10s. 2d. —the odd 2d. being given by a little boy—was subscribed. The list of subscribers to the fund which is being raised for the extension is long, but the principal one is Mrs. John Nixon, who gave the handsome sum of 10,000 guineas. Principal E. H. Griffiths, in moving a vote of thanks, referred to the problem of fighting disease, and stated that it was essential that science and medicine, surgical and hospital treatment should go hand in hand. The future of the Cardiff Infirmary was full of bright promise, and owing to the gift of the Treasury they were now in a position to look upon a closer union between the Infirmary and the University College and a larger extension of the medical school. A medical school could not be founded on £15,000 a year. The public must help. The resolution was seconded by the Rev. D. Davies. Professor Hepburn (Dean of the Medical Faculty), in supporting, said that the medical school brought before the public the first-fruits of all departments of science, and the whole community gained infinitely more than the mere cost of providing the opportunity. The University of Wales had established medical degrees which were the finest yet set going, and if they were to live up to those degrees they must provide a medical school, which would be thoroughly modern. The resolution was carried by acclamation.

The Housing Difficulty.

Dr. D. T. Rocyn Jones, J.P., County Medical Officer of Health for Monmouthshire, has just presented a report to the County Sanitary Committee on the condition of Abersychan. The estimated population of the area is 19,545, and the birth-rate last year was 41, death-rate 15.1, phthisis death-rate 0.5, zymotic death-rate 3.8, infantile mortality-rate, 113.4. The last named compares favourably with that of other industrial centres similarly situated. In the matter of subsidiary sewerage, provision for the isolation of the infected sick, health visiting for the reduction of infant mortality, and the future disposal of domestic refuse, the council, he says, is certainly a progressive body, and is ahead of the majority of the urban councils in the county. But in regard to the housing question, he regrets to record that the council's attitude is decidedly unsatisfactory. The disposal of domestic refuse is by means of tipping; many of these tips abut on the main road, and in one instance the tip is within a very short distance of a public elementary school, and is thus a menace to the health of the children attending this school. With regard to sewerage and drainage, great improvements have been effected during the past ten years; but he found that of the sewer outfalls a few directly and others indirectly poured their contents into the Avon Lwyd, increasing the nuisance started in the Blaenavon area. Dealing with the isolation hospital wards, Dr. Jones states that they are beautifully clean, well-ventilated, and the provision of a sufficient number of trained nurses might with advantage be emulated by some other councils. The lady health visitor is doing very useful work in the district, and her efforts, under the guidance of Dr. Mulligan, the district medical officer of health, will undoubtedly produce very beneficial results in the matter of cleanliness, decent living, and the saving of infant life. A public recreation ground and an open-air swimming bath have been provided, and the surveyor has been instructed to report upon the available sites at Pontnewynydd and in the South Ward, where similar open-air baths could be made. Summarizing his recommendations, Dr. Rocyn Jones submits to the urban council (1) the adoption of the Housing of the Working Classes Act, 1890; (2) the closure of the cellar dwellings and the houses named in the report, and the conversion of all cellar dwellings, with the dwellings immediately above them, into one through-house in each case; (3) the conversion of two adjoining back-to-back houses into one house, with through ventilation; (4) the conversion of back-to-earth houses into damp-proof houses by the excavation back of the adjoining soil at the rear curtilages to a sufficient depth to ensure an adequate dry area at the rear; (5) enforcement of the by-laws with regard to domestic refuse scavenging; (6) a public abattoir; (7) a refuse destructor; this is now under consideration by the council.

Scotland.

[From Our Special Correspondents.]

The Chair of Anatomy, Glasgow University.

Professor T. H. Bryce, who was appointed to succeed Professor Cleland in the Chair of Anatomy at Glasgow University, was introduced to the students by Principal Sir Donald MacAlister on October 18th. The Principal said that the new professor was no stranger to Glasgow and to the medical school. He had been sixteen years teacher at Queen Margaret College.

Professor Bryce acknowledged the welcome and delivered an inaugural address on "The Teaching of Anatomy in Glasgow." The chair, he said, was founded in 1718, and for one hundred years included the Professorship of Botany, but, notwithstanding some specialization, the chair had always remained one of Comparative Anatomy, and the ideal of 1720—that university teaching of anatomy involved the profession of everything that elucidated the structures of the human body—remained the ideal of 1909. In speaking of former occupants of the chair, Professor Bryce paid a high tribute to Professor Cleland, who, he said, held a foremost place amongst the anatomists of the day in respect to the breadth of his scientific horizon. He had been generally acknowledged as the most philosophic anatomist of his time. By his gift to the university, and to his successors in the Chair of Anatomy, of his admirable and interesting collection, Professor Cleland had left a rich inheritance, for which they could not be too grateful. Professor Bryce then outlined the courses in the different branches of the subject which he proposed to continue or to institute, and explained that his aim would be to combine in his instruction the scientific with the practical ideals of anatomical teaching.

Edinburgh Royal Infirmary and the Retirement of Professor Chiene.

The managers of the Royal Infirmary of Edinburgh have minuted the following appreciation of the services rendered to that institution by Professor Chiene:

Owing to his resignation of the Chair of Surgery, which he has so long adorned, the managers have had regretfully to part with the services of Professor John Chiene, and Professor Chiene's connexion with the Royal Infirmary has been a long

and brilliant one. He received the appointment of Assistant Surgeon in 1871, and was promoted to the post of Acting Surgeon in 1878. Four years later he became Professor of Surgery in the University of Edinburgh, and was entrusted by the managers with charge of the wards attached to that Chair. His services, given wholeheartedly and enthusiastically, have thus extended continuously over the long period of thirty-eight years. The managers desire, in now taking leave of Professor Chiene, in his capacity of one of the surgical staff of the Royal Infirmary, to record the very high esteem in which they hold him as a man, a surgeon, and a teacher, and their grateful recognition of the unfailing kindness which has throughout characterized his relations with his colleagues, and the skill and interest he has shown in his care of the many patients who have passed through his hands. His skilful and judicious treatment of patients from far and near, and his good influence over them, and all with whom he has worked in the infirmary, will be long and gratefully remembered. The managers regret that Professor Chiene's retirement should have been caused by ill health. They trust that relief from the strain of teaching and hospital practice may effectually restore him. In token of their high appreciation of his great reputation as a surgeon and professor, as well as of his past services to the institution, the managers beg to offer him the post of consulting surgeon.

Royal (Dick) Veterinary College, Edinburgh.

To illustrate the fact that veterinary science is now being sufficiently recognized by the educational authorities it may be mentioned that in connexion with the movement for rebuilding the Royal (Dick) Veterinary College, Edinburgh, on a new site at the east end of the Meadows, the Scottish Education Department has formally decided to recognize the College as a central institution under the Education Act of 1908, and to provide up to £25,000, a sum equal to the amount raised locally, towards the cost of the new building. The college, which is the oldest of its kind in Scotland, is said to be more largely endowed in respect of its Chairs than any veterinary institution in the kingdom. The proposed new position fronting the Meadows has the great advantage of being near the medical schools of Edinburgh, with whose work veterinary science must gradually become more closely associated. The cost of the site is estimated at £8,750, and that of the new buildings £41,250; so that, allowing for the proportion to be granted from Government funds, the amount to be raised by subscription is £25,000. The plans show the site divided into two portions. The front part is to be occupied by the main buildings, which form the teaching section, and on the back portion the clinical section will be raised. The buildings of the teaching section are to be arranged so as to enclose a large grass court. Most of the buildings in the clinical section, situated behind the main group, are to be one story high, and will consist of two operating rooms, a *post-mortem* room, stable and byre accommodation, dog and cat wards, consulting rooms, apartments for the professors, and pharmacy rooms. In the court a "lunging" ring and a trotting track will be provided. The college was founded in 1823 by Professor Dick, the son of an Edinburgh farrier. Professor Dick commenced his teaching venture with one student, but the number of pupils rapidly increased. When he died in 1866 he left the college in trust to the Lord Provost and Magistrates of the City.

Lunacy in Glasgow.

In the twelfth annual report of the Glasgow District Asylum, Gartloch, Dr. Parker, the medical superintendent, refers to an important innovation which has been introduced by him. With a view of endeavouring to re-educate the faculties of the younger lethargic dements he has introduced musical drill. The experiment has been tried first on female patients and consists in training them to perform simple drill exercises, including musical drill and singing exercises, such as might be employed in schools for young children or for young persons of congenitally weak mind. Singing classes are also conducted in the various female wards. A special drill mistress has been appointed. Though the experiment has only been in force for a comparatively short time, Dr. Parker states that the classes promise to be useful and to assist a wider circle than that originally thought of. Open-air bed treatment continues to give satisfaction, and is used in all new and recurrent cases. After ten years' experience of it, he has no hesitation in stating that its routine use in new and excited cases secures more restfulness, better sleep, and better assimilation of food than when patients are treated either out of bed or in bed indoors. Cases of excitement do better in bed as a rule and best in the open air, and as much alone as can be arranged. In prolonged cases of bed treatment, massage, hot or cold sprays, prolonged baths or the static brush applications are used to secure peripheral stimulation, and improve the circulation and assimilation. Dr. Parker again finds alcohol, alone or in combination, the most prolific cause of the insanity in the cases admitted. The recovery-rate at Gartloch (37.58 per cent.) is very satisfactory, as the less troublesome and more easily recoverable cases do not go there, but continue to be treated in the observation ward at Duke Street without certification. During the year there were 96 deaths. As usual, general paralysis heads the list of the causes of death, and is responsible for fully 29 per cent. of the total. The maintenance rate has again been reduced this year from £28 16s. 5¼d. to £27 1s. 1½d.

It is interesting to compare Dr. Parker's report with that of Dr. Carswell, certifying physician in lunacy to the Glasgow Parish Council. He points out that there has been a gradual increase in the proportion of pauper lunatics chargeable to Glasgow from 314.7 per 100,000 of population in 1901 to 371.8 in 1909. He thinks that this increase is due partly to the accumulation and partly to the increasing disposition to send to the asylums persons suffering from senile forms of mental weakness. The increased numbers in asylums do not necessarily mean an increase in the number of persons becoming insane. The real test is the number becoming insane for the first time; this has remained fairly steady since 1901. Further, the rate is remarkably steady for those so admitted between the ages of 15 and 45—that is, the active period of life. The increase has been almost entirely in the occurrence-rate among people over 45. The following table brings this clearly out:

Year.	Total No. of Cases.	Proportion per 10,000 of Population living at those Ages.	No. of Cases.	Proportion per 10,000 of Population living at those Ages.
	(15–45.)	(15–45.)	(Over 45.)	(Over 45.)
1901	231	8.0	120	12.7
1902	256	8.8	127	13.3
1903	210	7.1	156	16.0
1904	246	8.2	109	11.0
1905	244	7.9	163	16.2
1906	222	7.1	134	13.1
1907	245	7.7	167	16.2
1908	218	6.8	193	18.4
1909	243	7.4	175	16.3

It is argued that there is here no evidence of race deterioration, as this would also affect the admission-rate during the active period of life. The fluctuating but increasing admission-rate of those over 45 is largely accounted for by trade depression and other social causes. Dr. Carswell states that the most potent causes of insanity between 25 and 50 years of age are syphilis and alcohol, and it appears that the former is causing more insanity than the latter.

Fife Miners.

The Kelty doctor question dispute, which the profession in Scotland have been watching with much interest, has been amicably settled. The heads of the agreement, which will probably apply to the whole of Fife, were adjusted in the following terms:

1. Each man employed at the Fife Coal Company's collieries in the Kelty district to nominate on the back of his pay ticket, on a day to be afterwards named, the doctor whose services he desires for the next quarter, a list of the names of the men to be sent to the doctor who has been nominated by them.
2. Quarterly each man shall thereafter nominate on the back of his pay ticket the doctor whose services he desires for the ensuing quarter.

3. Each doctor to receive the contributions of the men who nominate him.
4. In accident cases requiring immediate attention the first doctor called must attend until the man's own doctor is available, when the case shall be handed over to him.
5. Either party may reopen this arrangement at the end of six months from this date.
6. The question of the supply of medicines to be further discussed after consultation with the men and the Fife Medical Association.
7. Pending final arrangements, the 6d. per fortnight deducted for medicines and medical attendance from the date of expiry of the notices already lodged shall be retained by the company, and divided between the doctors, according to the nominations of the men.

THE EDINBURGH AND LEITH MEDICAL PRACTITIONERS' ASSOCIATION.

The annual general meeting of this Association was held on October 15th, when it was reported that discussions had been held on public health matters, the medical aspects of the new Scottish Education Act, and on club practice. The committee had taken action in several cases affecting the relations between doctors and various public bodies. The social side of the association was held to be very important, and there had been a dinner, a smoker, and two golfing outings, all of which were well attended. The membership was 276. There had been three deaths during the year—Drs. W. W. Ireland, Charles Kennedy, and Donald Murray. Dr. Elder was accorded a hearty vote of thanks for his good offices as first president, and Dr. James Ritchie was elected to succeed him.

The second annual dinner was held on October 21st, when about ninety were present. The guests were: The President of the Royal College of Surgeons of Edinburgh, Professors Alexis Thomson, Arthur Robinson, and F. M. Caird, Sir John Batty Tuke, and Dr. Clouston. Professor Alexis Thomson, who proposed the toast of the association, said that it was now a settled corporate body, and there was no need for him to offer advice, but rather to offer congratulations on its satisfactory progress and on the good work it had done and was doing. He praised the social side of the association, and thought it a most excellent way of bringing professional brethren into contact. Dr. James Ritchie briefly replied, and thereafter Drs. Darling, Gulland, Orr, Barnetson, Elder, Fordyce, and James helped by song and story to pass a very pleasant evening.

EDINBURGH POST-GRADUATE VACATION COURSE IN MEDICINE.

No fewer than 87 members of the profession attended the autumn course this year. There were 7 ladies. There came from the United States as many as 13 members, 7 from Australia, 6 from India, 5 from Canada, and others from British Guiana, the Federated Malay States, China, British Columbia, New Zealand, Tasmania, Central Africa, New South Wales, Jamaica, and Palestine.

INVERNESS-SHIRE SANATORIUM FOR PHTHISIS.

The first annual report of this sanatorium has just been issued. The same difficulty in connexion with the admission of patients in a sufficiently early stage of the disease which was the experience of the Ross-shire sanatorium exists here, although the report states that it is diminishing. The free beds to which fourteen patients are admitted were always full, and twenty-eight paid as much as their means allowed. The finances as yet only allow of a small number of free beds. In all 42 patients were admitted. The disease was arrested in 28.5 per cent., and 47.2 per cent. were improved. One patient died after admission, and three after being sent out.

SCARLET FEVER IN EDINBURGH.

Scarlet fever continues to be the outstanding infectious disease in Edinburgh. In the week ending October 23rd, 44 fresh cases were notified, and on that day there were 269 cases under treatment in the City Hospital at Colinton Mains. There is a singular absence of enteric fever.

ROSS MEMORIAL HOSPITAL, DINGWALL.

Last week the new fever wards of this hospital were formally opened. The extension has long been required, and is the most important effected since the inception of the institution thirty-six years ago. The present extension consists of an up-to-date suite of wards for the isolation and segregation of infectious diseases. The fever wards have been removed from the main building, which is now entirely devoted to medical and surgical cases.

Sydney.

REGISTRATION OF PRIVATE HOSPITALS.

THE regulations under the Private Hospitals Act have been gazetted, and steps will at once be taken to bring the Act into force. As soon as possible the Act and regulations thereunder will be printed and circulated, but this does not relieve proprietors of such hospitals from the responsibility of lodging their applications. All private hospitals must in future be carried on under the authority of a licence. The administration falls upon the Chief Secretary and the Board of Health. The regulations require that every person who on October 1st is carrying on any private hospital or who proposes thereafter to open any private hospital shall apply to the Secretary of the Board of Health for a licence. The applicant must also forward testimonials of good character and fitness to conduct a private hospital from reputed and known persons. Applications for the renewal of licences must be made annually not later than November 15th in the current year, and will, if granted, take effect from January 1st next ensuing. No alterations, additions, or subtractions may be made in any licensed building, nor any alteration in the use of the licensed rooms except by permission first obtained from the Board of Health. Applications for the exemption of hospitals from the operation of the Act must give a full statement of the reasons why exemption should be granted. In addition to providing rules for the registration and inspection of private hospitals, this Act requires the Board of Health to keep a register of hospital nurses and of midwifery nurses, and to give every person so registered a certificate of registration. The names of nurses may be removed from the register after inquiry. If cause for such inquiry appears to the Board, the nurse is to be informed of any charges against her, and she is to have the opportunity of answering them and showing that her name ought not to be removed. There are other regulations bearing on the reporting of births and deaths occurring in private hospitals, and also on the reporting of cases of infectious diseases occurring therein. The main objects of this Act, which was introduced into Parliament by the Hon. Dr. C. K. Mackellar, is, of course, to get at the lying-in hospitals and other houses which are used as abortion houses, and it should be effective in suppressing these institutions.

DEATH OF DR. MUSKETT.

Dr. Muskett, a well-known practitioner in Sydney, died rather suddenly at his residence last month. He was a native of Victoria, and was 52 years of age at the time of his death. He was a student in Melbourne, and then proceeded to Edinburgh, where he obtained the diplomas of the Colleges of Physicians and Surgeons. He returned to Melbourne, and was a resident medical officer at the Melbourne Hospital. He was afterwards Resident Medical Officer at the Sydney Hospital. He held other offices, including that of Medical Superintendent of the Quarantine Station many years ago. He was best known to the public of New South Wales by his popular medical writings on diet, infant feeding, etc. His funeral took place at Waverley Cemetery. He was unmarried. Application is being made for probate of his will to be sworn at £150,000. The income of this amount is to be paid to his sister for her life. At her death his trustees are

to distribute annually £1,000 among the following charities, the first seven to receive £100, and the remaining six £50 each: Sydney Hospital, Sydney Fresh Air League, Melbourne Hospital, and the following hospitals for sick children: Melbourne, Brisbane, Adelaide, Western Australia, Hobart, Launceston, Auckland, Wellington (N.Z.), Christchurch, and Dunedin. The trustees are also instructed to establish "The Philip Muskett Biennial Bequest." The bequest is to be competed for in the form of an essay every second year; such competition is to be open to any person of Australasian birth, or who has resided in Australia half his or her life. The object of the bequest, which will be worth at the outset about £700, and later £1,000, is to popularize and promote the principles which the testator always advocated in his published works—namely, the education of mothers to prevent the deaths of so many Australian infants, the improvement of Australian national food habits, and the extension of teaching technical education in the State schools. The bequest is to be administered by the committee for the time being of the Sydney School of Arts. It is laid down that the essays must reach the secretary on or before March 31st in each year in which the bequest is open for competition, the award of the committee is to be made before June 30th next following, and the winner of the prize will be required to read the essay in the hall of the institution on September 30th. Provision is also made for advertising the bequest by £1,000 being set aside as a notification fund. The income to be derived from the investment of the notification fund is to be increased until it reaches £100 per annum, and the advertisements are to be inserted in the newspapers in the Commonwealth and New Zealand.

Special Correspondence.

PARIS.

Unveiling of Statue of late Professor Tillaux.—The Second International Pure Food Congress.

A MONUMENT to the late Professor Tillaux was recently unveiled in the gardens of Clamart, close to the amphitheatre where he for so many years taught anatomy, being director from 1864 to 1890, as well as professor of clinical surgery. He died in 1904 at the age of 70. The statue, representing the professor wearing his dissecting apron, and demonstrating with his finger on the body of a youth on the table beside him, is by the celebrated sculptor Jules Chaplain. In addition to M. Lepine, the Préfet de Police, M. Mesureur, director of the Assistance Publique; M. Bayet, director of higher education, there were present the Dean of the Faculty of Medicine, the President of the Surgical Congress, and a great number of Professor Tillaux's former colleagues and pupils in the profession.

The Second International Congress for the suppression of food frauds, which is due to the initiative of the White Cross Society of Geneva, has been holding its meetings during the past week in Paris. The congress was very largely attended, no less than twenty-eight governments being represented. Professor Bordas presided, and in his inaugural address summarized the programme of the congress as (1) the examination of the operations necessary to the preparation of food commercially pure, and (2) the drawing up of definitions of the primary substances of drugs and chemical products. With regard to pure foods, the following were some of the more important decisions: At Geneva last year it was decided that 16 per cent. of water in butter was permissible; it has now been decided that the amount of water must not exceed 18 per cent. It was recognized that the employment of a preservative in butter was indispensable. Natural ice should be derived from water whose purity was guaranteed by a declaration of the sanitary authority, the ice being collected, stored, and transported under conditions preventing all external contamination. Wines for export could be fortified with alcohol derived from malt. Jams coloured with cochineal could be considered as "pure sweets." Coffee mixed with chicory was an adulterated food, and must not be sold as pure coffee; when chicory was mixed with ground coffee the fact must be stated on the labels. Artificial colouring of butter was not to be reckoned an adulteration.

VIENNA.

Threatened Strike of Hospital Residents.—The Winter Term.—The Dispute between Dental Surgeons and Dentists.

IN the Vienna hospitals, especially those under State control, the medical staff complains of a number of grievances of old standing. The position of the juniors is not clearly defined, and their duties and rights are often interfered with by administrative necessities. The pay is generally low, hardly ever exceeding £65 per annum in case of residents, and £80 in that of assistants, with lodging and only partial board. Recently the demand for hospital residents was so great that these appointments were offered to men fresh from the university, whereas formerly a man had to serve for some years without remuneration before being eligible for such a post. At present, however, the prospects in country practice is better; therefore many young doctors prefer to spend their time in the hospitals of smaller towns, where they can also have private practice at the same time. A memorandum enumerating the grievances of the hospital doctors (not including the chiefs of clinics and other wards) was drawn up in February, and forwarded to the proper authorities. No satisfactory answer having been returned, a partial strike in the smaller hospitals was contemplated. This caused a number of promises of reforms to be made to the doctors. None of these, however, have been put in force up till now. The doctors have finally informed the officials that unless their wishes are fulfilled they will send in notice of resignation of their posts on November 1st. It is hoped that this threat will be sufficient to bring about a speedy redress of the grievances. Public sympathy is with the doctors, and the bureaucratic method in which the matter has been dealt with by the authorities is unanimously condemned in the papers.

The present winter term, which lasts until the end of March, promises to be a most fruitful one for the students. No fewer than 457 separate classes and courses are announced in the *Lectionskatalog* or official programme, being 12 more than last year. The number of lecturing professors is 96; of these, 29 are ordinary, 67 extraordinary; 167 privat docents will help them to bring up the required total of classes. There will be 97 classes in medicine, 49 in surgery, 43 in gynaecology and obstetrics, 39 dealing with pathological anatomy, 38 in dermatology, 32 in ophthalmology, 27 in otology, 23 in psychiatry, and many others dealing with anatomy, pediatrics, chemistry, forensic medicine, materia medica, and laryngology. The fees are rather low, especially for students, whilst doctors—foreign as well as Italian—have to pay the full fee of at least £2 2s. for a course of twenty hours. Some are dearer, but as a rule they do not exceed a maximum of £4 4s. Special classes in English language will also be held, but these are not enumerated in the programme, being privately arranged with foreign visitors.

The dispute between dental surgeons and dentists—which is, in fact, nothing else but the endeavour of non-qualified men to obtain the right of qualified practitioners—has caused much uneasiness in the profession. The following are the chief points of the dispute: On the one hand, the dental surgeons, who must have the M.D. diploma of a recognized university in this country, wish to keep all manipulations for the repair of damaged teeth and the artificial replacement of lost teeth in their own hands. On the other hand, the dentists—formerly mere technical assistants of the surgeons—have organized themselves and demand that the surgeons should be restricted to purely surgical interference within the mouth, while the remainder of dentistry, including the extraction of carious teeth and the filling of cavities, is to be their lawful preserve. Such a concession would not only mean the ruin of many hundreds of medical men in this country, but also a breach of the present law, which

says that nobody may practise medicine or surgery on human beings for profit unless he holds a university diploma entitling him to do so. The whole profession is supporting the dental surgeons, whilst many influential men in public life are favouring the dentists. The question will shortly be brought before Parliament, as a bill is being prepared by the Government, and both parties are trying their best to enlist public opinion on their side.

Correspondence.

HOME RULE FOR LONDON.

Sir,—In answering the letters which have appeared in your Journal during the last two weeks I may say that I do not propose to be drawn off into various side issues which make for nothing.

As to the matriculation examination and the questions raised concerning it, if the writer will refer to the *Times* of October 27th he will see a complete answer in a letter written by myself.

My statement that there was little difference between the strictly medical examinations of the Conjoint Examination Board and the London University was made from information supplied by those most likely to know—namely, examiners in both the London and the Conjoint examinations.

It is not to be expected that anyone from the provinces who has or hopes to have a hospital appointment will do otherwise than decry any attempt to improve the position of London as a great medical centre, and also it is well known that a certain class of graduate of the University of London will do almost anything to keep the present suicidal arrangements in force. My appeal was in no sense addressed to them—it would be useless to do so. It was addressed to people with a large enough mind to look beyond the mere trivialities of an examination more or less hard to pass because of some peculiarities which are of no practical value, and who would be able to see the great possibilities of medical London in the future if the various examining bodies would only wheel into line.

Nothing could be truer than what Professor Osler said at the London Hospital a few days ago—namely, "Examinations and degrees are merely means to an end."

The misfortune is that it seems to be only those whose interests are limited to examinations and degrees that take any active part in the various discussions on this question.

The immense future of a properly organized medical London is something too large for those who have only limited interests in the matter to grasp, and the question must be taken up by practical men outside the profession as well as by those desirous of progress who are in it, and I have every hope that practical men will come forward and give evidence before the present Royal Commission which will ensure medical London obtaining that which it urgently requires as soon as possible.—I am, etc.,

London, W., Oct. 26th. Fred. C. Wallis.

Sir,—Being a member of the Senate of the University of London, I have read with some surprise your annotation under the heading "Home Rule for London" in last week's issue of your Journal. I must congratulate you on the journalistic enterprise by which you have been enabled to comment on the intimate proceedings of the Senate meeting of Wednesday in your paper published two days later. Since, however, your Senatorial informant has apparently only supplied you with what reads like a *résumé* of Professor Starling's speech at that meeting, and ignores all other views, I feel that—much as I regret that the tradition has thus been violated which rules that these matters should not be made public until the minutes of the meeting have been formally confirmed—it is essential that your readers should be more fully informed on what took place.

The proposal for "Home Rule in the Faculty of Medicine" (the phrase is that used by Professor Starling) originated in a memorandum presented to the Faculty of Medicine by Professor Starling, in which he has the following clause:

"The change, therefore, can only be carried out by consent of the Senate and its Councils, and, if the recommendations of the Faculty are to have sufficient weight with the Senate to persuade this body of their advisability, it is essential that they should be carried by a large majority at a full meeting of the Faculty, and not, as usually happens, by a chance majority at a meeting which only just exceeds the necessary quorum."

To achieve this "full meeting" urgent whips were sent to every one of the 400 or more members of the Faculty; yet, in spite of every appeal, so little enthusiasm for these proposals was felt that the meeting at which they were finally carried only "exceeded the necessary quorum" by four. It is true that these recommendations were subsequently endorsed by the Academic Council; but, as Professor Starling himself pointed out in debate, medical opinion on that body was represented only by himself and one other physiologist, who did not support him at the Senate.

Your annotation attempts to fix on the External Council the responsibility for wrecking Professor Starling's scheme, and yet has the temerity to recommend a scrutiny of the division list. While it is true that the External Council, deprecating large constitutional changes on the very threshold of a Royal Commission, reported against this scheme, it was rejected at the Senate by the weight of medical opinion against it, and in no sense by a "political" division, such as your informant implies. As seconder of the motion which was carried and of the motion for a division, I took particular note of the voting, and so can supply the list to which your informant refers your readers. It was as follows:

Minority, Nine Members.

The Provost of University College.	The Rev. Principal of King's College.
Professor Cormack.	The Rev. Professor Bennett.
Professor Starling.	Mr. C. V. Barrington.
Professor Gardner.	Mr. Graham Wallas.
The Rev. Professor Caldecott.	

Majority, Twenty-five Members.

Sir Thomas Barlow.	Dr. Graham Little.
Sir Edward Busk.	Professor S. L. Loney.
Sir William Collins.	Dr. Lambert Mears.
Right Hon. the Master of the Rolls.	Right Hon. Lord Justice Moulton.
Sir Thomas Crosby.	Sir Francis Mowatt.
Dr. Crossley.	Professor Thomson.
Rev. J. A. Douglas.	Dr. Frederick Taylor.
Mr. Clifford Edgar.	Dr. Wade.
Miss Edgell.	Dr. Waller.
Mr. Pearce Gould.	Dr. Walmsley.
Mr. Hatton.	Dr. Russell Wells.
Mr. Cyril Jackson.	Sir John Wolfe-Barry.
Dr. Kimmins.	

Analysis of this list completely disposes of the contention that a repugnant course was forced on the Faculty of Medicine by the representatives of Convocation. It may, indeed, be suggested by some that, since of the minority of nine no fewer than seven members hold appointments at University and King's Colleges, the scheme presented was really a "political" effort of these two colleges. I do not wish, however this may be, to make the suggestion; but I do beg your readers especially to note that Professor Starling was the only medical member of the Senate who voted for his own motion, while the majority comprised such eminent and impartial clinical teachers as Sir Thomas Barlow, Dr. Frederick Taylor, and Mr. Pearce Gould, and it contained eight medical members, and three teachers of science subjects to medical students, besides such acute, instructed, and sympathetic laymen as the Master of the Rolls, Lord Justice Moulton, Sir Francis Mowatt, Sir John Wolfe-Barry, and Sir Edward Busk.

I cannot in the brief space of a letter enumerate the many weighty reasons which influenced the Senate in its vote, but I may point out that the board which the successful motion has constituted in the Faculty of Medicine, so far from being "emasculated," is to follow scrupulously the precedent which has been found to work so admirably in the faculties of Arts and of Science.

Professor Starling's scheme, if passed as it was presented, might have constituted a serious bar to the adoption of any co-operation with the Royal Colleges of Physicians and Surgeons, between whom and the university negotiations are now pending. I cannot but think it would be

exceedingly unfortunate for the success of those negotiations if it should go forth that any important section of medical opinion supports the proposition with which your informant appears to identify himself, that "a real university school of medicine will never be established until the Medical Faculty is freed from the incubus of the external student." It must be remembered that in other faculties than medicine external students are in a majority; that the University of London built up its great reputation on the external student; that it rests financially upon its external side, and if annually a large sum were not paid over from the profits of that side to the university chest, the internal side, which does not even pay its way, would, I am assured on the best authority, be at present in a state of bankruptcy.—I am, etc.,

London, W., Oct. 26th. E. Graham Little.

Sir,—Your valued article on the "University and the Medical Schools of London," and Dr. F. C. Wallis's support of the required change of the matriculation substitutions or exemptions of the University of London, if the London medical schools are to retain their old foremost positions, are certainly not upset by Dr. Horace Wilson's selfish view of the market value of the M.D.London. I call that, in my book, *Medical Reform Measures*, the "Degree Shop" side, and, of old, the only side of the University of London. But it refers to the saturating spirit of acquisition and greed that underlies the low, sufficient grasp of business. Examinations are pure business, and examinations and business are nothing compared to the freedom of teaching which alone constitutes Science. This ought to be the convincing case in London. The retention of those other false standards and not determining upon the total recasting of the sinecure and perpetual lectureships and chairs and posts at the hospitals, together with more regular and real university teaching and opportunities *for all*, and the necessary junction with the Royal Colleges of Surgeons and Physicians, is ruining London and the empire in the Medical Faculty. On the retention side, and not the reform side, it is, of course, most deleterious, too, to retain and tolerate any longer that almost defunct system of apothecaries, and the useless body of the Society of Apothecaries. In this way the superior training obtainable abroad and the real university training available in the provincial universities is the true, as the examining favour is the untrue, cause of what, in my book, I have proved to be the rise of the provincial university attractions.—I am, etc.,

Bognor, Nov. 25th. H. Elliot-Blake.

CLUB PRACTICE AND THE POOR LAW REPORTS.

Sir,—In the Journal of October 16th, p. 1193, Dr. J. Griffiths writes that "the clubs would wish to pay the doctor a proper salary." I think he must be unaware of, or have forgotten, the following facts:

At a conference held in February last, the Friendly Society delegates flatly refused to even consider the suggestion for fixing a wage limit. Ten years ago a similar conference proved equally abortive for the same reason. At a conference of the Friendly Societies' Medical Alliance, held at Darlington some months ago, a resolution was passed to the effect that "the conference could not, at any time, recognize any decision accepting a wage limit for the attendance of a friendly society's doctor."

Dr. Griffiths can hardly consider 3s., or even 4s, a "proper salary" for attending well-to-do tradespeople, farmers, etc.

This question of a wage limit is the great point at issue. No one, I take it, objects to attending, at club rates, the genuine working man who has joined a club principally for the sake of the sick pay, but one does very strongly object to providing those who are well able to pay our ordinary fees, with medical and surgical attendance for 4s. a year. These latter members have, I think, been induced to join a club, not for the sake of the sick pay (many of them would be ashamed to accept it), but simply that they may obtain the cheap "doctoring" the club offers them. It follows, therefore, that the club doctor acts as a very excellent and a very cheap advertisement for his club, an advertisement which brings in members who otherwise would not join and who are the very members that the doctor objects to attending at club rates.

The General Medical Council has decided that any medical man who advertises shall be deemed guilty of infamous conduct in a professional aspect. Might not it be argued that if it is infamous to advertise *oneself*, with, I presume, the object of *increasing* one's income, it is also infamous conduct to act as an advertisement for a friendly society, thereby enabling the society to entice away our private patients and so to *diminish* our incomes?—I am, etc.,

South Brent, Oct. 18th. F. W. Style.

INTERMITTENT CLOSING OF CEREBRAL ARTERIES.

Sir,—In his most interesting lecture in the British Medical Journal of October 16th, Dr. W. Russell has drawn attention to the effect of intermittent closure of the cerebral arteries in regard to paralysis. Since the researches of Kussmaul and Tenner in 1857 spasmodic closure of the cerebral arteries has been regarded as one of the possible causes of epileptic fits. In consequence of this I used nitrite of amyl in epilepsy with the idea of relaxing such a spasm and thus cutting short a fit (*Lancet*, July 27th, 1867). I had very little success from this treatment when the fit was fully established, but others who have used it since have sometimes been able to cut the fit short when the medicine was applied just at its beginning. Some years ago when suffering from severe headaches I found that the ascending branch of my anterior temporal artery became contracted like a bit of piano wire, and pulseless, during the headache, and reasoning from this condition, which occurred in one of the branches of the carotid outside the head, I thought that a similar condition might take place inside the cranium. As these observations were published in a paper on "Hallucinations" in the *Journal of Medical Science* for April, 1902, they may not be familiar to many people who do not concern themselves with neurological subjects and I may perhaps be permitted to quote them here.

The pain of migraine is frequently accompanied by other phenomena, which are readily explicable on the hypothesis that those branches of the carotid artery which pass to the interior of the skull are affected in the same way as those which pass to its outside. If the terminal branches of the temporo-sphenoidal artery become contracted like a bit of piano wire, as the one which runs up my forehead does during a headache, the nutrition of the centre for sight in the brain must necessarily be impaired; and if the spasm should extend farther down the artery, the centres for hearing, taste, and smell, will also suffer. I think it is probable that such impairment is the cause of the indistinct vision; of the hemiopia, that is, blindness to all objects on one side of the body, either to right or left; even of complete blindness, and of the zigzags which occur either before or during an attack of migraine. The senses of taste and smell are less frequently affected, but I have one case in which the patient has neither taste nor smell during the attack of headache, and after it is over both taste and smell return quite suddenly. In this patient there is no disturbance of vision, nor is there any aphasia during the attack. In other cases one finds aphasia to a greater or less extent present during the attack, and passing off when it is over.

—I am, etc., Lauder Brunton.

London, W., Oct. 20th.

Sir,—I have read with great interest Dr. W. Russell's paper on the intermittent action of cerebral arteries, as it exactly expresses what I have for some time felt must be the true explanation of cases such as he quotes and some others. My attention was first drawn to the subject some years ago by a case almost on all-fours with the one he mentions; but the chief feature was aphasia, which recurred frequently, with a varying amount of affection of the face, arm, and leg, which always cleared up after a day or two. The patient was a man with thickened arteries and high tension; but it was before the days of Riva Rocci, and I can give no figures. Though I failed at that time to hit off the true explanation of the symptoms, and lost sight of the man after two or three years, I never forgot the case. Since then I have seen some similar cases, though not so marked, and others of a somewhat different character with, I believe, the same explanation.

Any one who has looked carefully at senile and diseased cerebral vessels in the *post-mortem* room is aware of the irregular and patchy character of the changes present. There are small nodules of thickening or patches of atheromatous and calcareous change, which, I believe, act

as the starting point of waves of tonic spasm, just as a polyp in the intestine or a small nodule of new growth will give rise to irregular peristaltic waves. Anxious to get at the physiological view of this theory, I wrote to Professor Sherrington in February, who kindly replied:

> As to local tonic spasm of short lengths of small arteries, one sees them often enough in experiment. Warmth, cold, slight mechanical injuries, as when a student touches a vessel in blood-pressure observation, all quickly produce such spasm, and they can amount to almost obliteration of the lumen.

As to diseased vessels, he says:

> The unequal yield of an artery at points of commencing change, with relative loss of elasticity there, might set up unequal stresses that irritated mechanically the contractile coat in the neighbourhood. Unstriped muscle is peculiarly easily excitable by mechanical strains; Bayliss has recently shown that the sudden stretch of an artery by a forced rise of blood pressure brings of itself an after-spasm in the muscular coat.

The existence of a condition of spasm is thus proved by physiological experiment as well as by the pathological evidence from other parts quoted by Dr. Russell. I venture to think that the cause I suggest is the probable one.

The spasm theory explains many cases which are otherwise difficult or impossible of explanation. Besides the cases similar to those already quoted, I feel quite certain that there are not a few cases of temporary but recurrent mental derangement in the aged which are explicable on the same theory. The old people whose wills are the harvest of the lawyer and the despair of the Probate judge, because of the conflicting evidence as to their sanity, are, I believe, often the victims of recurrent arterial spasm. The spastic phase grows longer and longer, until at last perhaps thrombosis ensues, and with it softening. I have seen several cases of an old man or woman who suddenly developed a delusion or *idée fixe*, or refused to speak or eat for twenty-four hours, and then suddenly got well again, but only to repeat the same process two or three times. I have seen more than one of such cases get well more rapidly than I had hoped under the use of vasodilators. It was partly this fact which led me to the theory, which is of course incapable of direct proof, but is at least worth trying as a basis for therapeutic measures in cases which otherwise are not amenable to treatment.

I should like, in conclusion, to say one word on this point. The general measures which Dr. Russell outlines are of course of the first importance, but the special question is the choice of a vasodilator. I have no hesitation in agreeing with him that erythrol tetranitrate is the best for the purpose, mainly because its action is slower. Though I have never seen any harm accrue from their use, I think the rapidly-acting drugs such as trinitrin are not so suitable for the dilatation of these old thickened arteries which react so slowly. I found with the Riva-Rocci instrument that after trinitrin gr. $\frac{1}{100}$ the blood pressure rose for a few seconds from 5 to 7 or more mm. before falling, the explanation being, I suppose, that cardiac stimulation preceded vascular dilatation in old vessels. This cannot be wholly without risk where on my hypothesis there is localized disease of the vessel wall as well as general thickening, though, as I have said, I have never seen or heard of any accident. I have used erythrol ever since its introduction, and found it a most satisfactory drug is suitable cases.—I am, etc.,

Brighton, Oct. 18th. EDMUND HOBHOUSE, M.D., F.R.C.P.

THE TREATMENT OF CONSUMPTION AT DAVOS PLATZ.

SIR,—A recent visit to Davos Platz brought me into contact with several who were undergoing the cure for consumption, and, on the whole, I must say that the results seem to be very encouraging.

Of course there are strict regulations as to spitting, as to disinfecting of rooms used by invalids, and the sterilizing of knives, forks, etc., used by invalids.

Plenty of fresh air was always the rule, and windows were left wide open at night, and the cure was carried out on balconies attached to the bedrooms of invalids. The ruling authorities also studied what was best for all; the streets were often watered, and such a thing as a cloud of dust was never seen; dust could not be found even in the hotel where I resided. The milk supply was closely looked after and repeatedly examined.

The sanatorium at Schatzalp is a palatial institute with a marble floor, and every scientific apparatus of the latest date. The sanatorium at Clavadel is a bright and most pleasant abode, so situated as to receive a maximum amount of sunshine, even during the winter days. Some of the invalids residing here were enjoying life, of good colour, and appeared quite robust in appearance.

In the winter months, the sports of the place engage the attention of invalids and healthy visitors. I was told that invalids are allowed to skate but are not allowed to join in the other sports of tobogganing and bob-sleighing. In the summer, unfortunately, there is nothing to do. There are no sports—no cricket nor golf, perhaps some croquet in private grounds. In this I noticed a great drawback. There were young men in my hotel under medical treatment but without any sort of supervision. They did what was called the cure, and walked for an hour, but the rest of the day was spent in idleness, or brooding, or something worse. This is a matter for serious consideration by consultants and others who send cases away from home without some system of supervision. It seems, also, a great mistake that an invalid sent there for the cure should have his wife with him.

I had a look at the Queen Alexandra Sanatorium, which was nearing completion. Its situation is very imposing, but there were some residents who expressed doubt as to the security of the site; a short distance away there was evidence of old mountain slides. I heard a good deal about the treatment of consumption by passing nitrogen gas into the pleural cavity of the chest of one side for the purpose of compressing the lung of that side, the intention being to close up cavities in the lung by the compression in advanced cases of the disease. In some cases the results have been very satisfactory. A complete account of the treatment will shortly appear in a treatise to be published by those who have been carrying it out.—I am, etc.,

Durham, Oct. 20th. EDWARD JEPSON.

FORMALIN IODINE CATGUT.

SIR,—On my return a few days ago from an unusually long holiday, my attention was directed to a note on "Formalin Iodine Catgut," by Mr. F. J. Steward, F.R.C.S., which appeared in the JOURNAL of October 2nd.

As I have been using catgut prepared with iodine and formalin for about three years, and as my method for preparing it differs in some important respects from that described by Mr. Steward, I hope to write an article for publication in the BRITISH MEDICAL JOURNAL at an early date, describing its uses and methods of preparation, which up to the present time have not been published, though I have given full information on the subject to many of my surgical friends.—I am, etc.,

Cork, Oct. 18th. C. YELVERTON PEARSON.

CERVICAL RIB.

SIR,—Some years ago I had a case of double cervical rib in almost all respects similar to that recorded in the JOURNAL of October 2nd by Mr. R. Donaldson, even to the swelling and other signs, which suggested aneurysm of the subclavian. This was before the Roentgen rays were known, but it was not difficult to make a correct diagnosis, confirmed after death which occurred shortly afterwards from some other condition.

My chief object in writing this, however, is to draw attention to a different class of cases of cervical rib in which I have found mistakes made in diagnosis.

I refer to the shorter rib, the tip of which causes a small swelling in the anterior triangle of the neck, which I have seen mistaken for an enlarged (tuberculous) gland. I have come across a sufficient number of examples of this misleading condition to suggest to me that it may be worth while to draw attention to it.—I am, etc.,

London, W., Oct. 6th. J. EDWARD SQUIRE.

LEPROSY IN THE NYASALAND PROTECTORATE, BRITISH CENTRAL AFRICA.

SIR,—Having recently had occasion to institute an inquiry into the incidence of leprosy in Nyasaland, advantage was taken of the opportunity which thus

presented itself to collect such additional data as might be of interest. The various points regarding which information has been available may be summarized as follows:

1. *Approximate Numbers of Cases.*—The number of lepers actually observed was 769. The existence of some of these had become known by their applying in person to the Revenue officials to claim exception from the hut tax which is levied on all able-bodied adult males; others had been casually encountered; whilst a still larger proportion were returned by native chiefs and head men. From those districts in which no record of lepers was kept, but in which the estimates were based on the relative numbers observed by medical men, the returns yielded 839 cases. These two sets of figures make a total of 1,608, and as the population of the Protectorate is about 997,000, the ratio per 10,000 of the population would be about 16.13, which indicates for the disease a comparatively high degree of prevalence.

2. *Whether Leprosy is on the Increase or Decrease.*—The general opinion among observers was that the disease appeared to be on the increase; in only two districts was the number of lepers reported to be more or less stationary. The increase in some of the districts is attributed to ignorance on the part of the natives of the contagious nature of the malady and to the consequent complete freedom with which lepers are permitted to mingle with the healthy; in others, to the movements of natives from one part of the Protectorate to another owing to the settled conditions now prevailing and to the facilities and inducements afforded for travelling.

3. *Distribution of Cases.*—The disease is found to be decidedly more prevalent among natives inhabiting the shores of Lakes Nyasa and Chilwa, and the banks of the Shire river. Inland, and on the plateaus and highlands, it is said to be comparatively rare. There would appear to be a fairly noticeable tendency to the grouping of cases in particular localities. Thus on Lake Nyasa lepers are more in evidence at the extreme north end of the lake and on the coastal border of the West Nyasa district than elsewhere; on Chisi island on Lake Chilwa; and on the banks of the Shire river in the Ruo and Lower Shire districts.

4. *Tribes Affected.*—The disease is most prevalent among the Ankonde (North Nyasa district), Atonga (West Nyasa district), Chipeta and Achewa (Marimba district), Anyanja (Zomba and Chikala districts), Anguru (Mlanje district), and Chikunda (Ruo and Lower Shire districts). The tribes which were found to be the least affected were the Angoni, the Yao, and the Awemba.

5. *Question of Diet.*—Fish, either fresh or cured by drying in the sun (and without the employment of salt), is a staple article of food. A very large trade in dried fish, imperfectly cured, is carried on throughout the country; and it is of interest to observe in this connexion that the Angoni, the only tribe in the Protectorate who abstain from a fish diet, are the least affected with leprosy.

6. *Social Habits and General Surroundings.* — It has been noted that the tribes amongst which the disease is most commonly seen are of dirty habits—personal uncleanliness and a general filthy condition of their huts and villages being a noticeable feature. Hot, humid localities appear to furnish a large proportion of cases, many lepers being observed among the dwellers in swamps. Among certain tribes it is customary to destroy leprous children, and on the approach of a European lepers are often sent away or concealed. It is the practice among the cleanlier tribes to put away their lepers in the forest, and leave them there till they die, taking them food but not burying them when dead. Natives in the Marimba district, many of whom profess Mohammedanism, are also said to segregate their lepers in the forest, where they are but scantily provided for. While, therefore, it would appear to be the general custom to segregate, it is not uncommon among certain tribes to find a leprous man living with a healthy woman, and vice versa, the belief being that if the husband or wife, as the case might be, separated on account of the disease, he or she would fall a victim to the complaint. Some tribes evidently regard a local cause as at work, yet they do not appear to fear an ordinary contagious influence. In the Upper Shire district natives take no precaution to avoid contagion, nor is leprosy considered a bar to marriage.

7. *Their Ideas as to the Cause of Leprosy.*—In no instance did natives, when questioned, attach any suspicion to the causal connexion between leprosy and a diet composed largely of fish, nor did they incriminate food in any way. The Yaos, however, believed that the meat of elephant, hippopotamus, or rhinoceros (from which they abstain) may cause leprosy, and averred that the Awesa, who drink elephant's blood, suffer much from the disease. The Angoni, who abstain from fish, and amongst whom, as already stated, leprosy is least often seen, thought that rhinoceros flesh may be a cause. In the Marimba district natives attached suspicion to drinking water, and believed that in localities where water is scarce the sources of supply are sometimes polluted by lepers who creep surreptitiously to them at nightfall, and, either unwittingly or maliciously, infect the water by occasionally performing their ablutions in it. Some natives regarded leprosy as a hereditary complaint, and described it as "family disease." They believed that while children may contract the disease from their parents, the infection does not travel from husband to wife nor from wife to husband.

8. *Treatment.*—It would appear that natives have no remedy for leprosy, nor do they seem to have made any efforts in the direction of palliative treatment.—I am, etc.,

H. Hearsey,
P.M.O. Nyasaland.

July 9th.

REGISTRATION OF NURSES.

Sir,—As one who has for years taken an active part in the training and examination of nurses, will you allow me space to reply, in a few words, to a letter in your last issue from Mrs. Fenwick, who signs herself as the "Honorary Secretary of the Society for the State Registration of Trained Nurses."

Some time ago I received a booklet issued by the Association for the Promotion of the Registration of Nurses in Scotland, and on referring to its pages it seems to me that Mrs. Fenwick is in error in stating that the Journal of October 10th contained a paragraph on this subject "contrary to facts." I would ask any one interested in this controversy to procure this booklet and study its contents. It can be obtained from the Acting Secretary, Mr. A. S. Murray, 169, West George Street, Glasgow.

In it will be found, in addition to a statement of the objects of this Association, the names of the office-bearers and Executive Committee. I observe on page 21 that the Scottish bill admits fever and mental nurses to a *special* register, and on page 25 I read the following paragraph: "The delegates from Scotland were willing to concede the matter of a one-portal examination, provided that the several parts of the United Kingdom were adequately represented, and that the principle of administrative decentralization were not excluded." These two points may suffice to prove that Mrs. Fenwick's statements are inaccurate and misleading, if not indeed "contrary to facts."—I am, etc.,

Late Lecturer to Nurses.

October 27th.

Sir,—The objection raised by your Scottish correspondent, to which Mrs. Bedford Fenwick alludes—"that Lord Ampthill's bill provides for a council which only represents nurses"—is, indeed, a marvellous one. If your correspondent will look at the bill, he would realize the really wonderfully constitution of the proposed council, which, if it had not been proposed by serious people, would be considered to be an elaborate joke.

Let me state the composition of that council, which is not accurately stated by Mrs. Bedford Fenwick. It is to be composed of sixteen persons:

Three nominees of the Privy Council, of whom one is to be a woman (not necessarily a nurse).
Six medical practitioners elected by various societies.
Six registered nurses elected by ballot. (Imagine a ballot of nurses scattered all over England! This will result in the choice of these six ladies being in the hands of a very few.)
One past or present matron of a public hospital for the insane.

Mrs. Bedford Fenwick is quite right—she and I do not often agree—in stating that such a council cannot accurately be described as "only representing the nurses"!

Do your readers realize, as has already been pointed out by the Central Hospitals Council, that there is no provision on this proposed council for ensuring the representation of even one of the great training schools for nurses nor of any matron other than the matron of a lunatic asylum?

It is possible, of course, that the absurdity of such a council has been realized by Mrs. Bedford Fenwick's society, and that they have proposed another. But your correspondent was dealing with the bill which Lord Ampthill introduced on behalf of that society, and which was carried through the House of Lords, but not yet carried through the House of Commons, nor, D.V., will it ever be.—I am, etc.,

London Hospital, E., Oct. 25th. SYDNEY HOLLAND.

THE POOR LAW REPORT AND THE SANITARY MEDICAL SERVICE.

SIR,—Dr. Lyster makes some statements in his letter which are—to say the least of it—not polite, and as they are not statements of fact, but only of opinion, I think he ought to refrain from making such sweeping assertions which he cannot substantiate, the more especially as they are charges of "dishonesty of principle" against those whom he appears to condemn wholesale from an unfortunate acquaintance with a small minority of their class. He seems to have taken to heart that good old maxim in debate—When you have a bad case, abuse the other side.

In referring to gratuitous work he defines it as work for which a doctor gets no pay, and apparently considers half-paid work is not gratuitous; neither is it, but, surely, half of it is! Will an extension of "contract" and 'departmental club" work improve this?

Dr. Lyster seems surprised that I should find public health work in small districts pleasant, but I can assure him that I do. Unpleasantnesses arise certainly, but the work is far more pleasant than "club work," and I have had practical experience of both. He says that the average part-time medical officer of health finds it impossible to do honest and conscientious sanitary work. Why? Dr. Lyster's reason is that he would find little time for private work, lose income, and his post.

First, as to his sweeping and unjust charge. I know many part-time men whose honesty, integrity, position, and dignity are certainly equal to those of any whole-time officer.

Secondly, it is not clear how doing the work of a small district properly should take up the whole of a man's time and leave none for private work. If a whole-timer can look after 21,000 persons, why cannot a part-timer do justice to 3,000 in part of his time?

Thirdly, he will lose his income and post! But what about the whole-timer? He stands to lose his bread and cheese; his whole living is at stake, whereas the part-timer *has* another string to his bow. Assuming that the human nature of the two officials is equal, surely the whole-timer is less independent, and has greater need to "trim his conscience"! I have appealed to human nature, which usually means the low side of it, as Dr. Lyster does not credit a part-timer with a conscience, and evidently cannot imagine him being inspired with an honourable desire to do his duty. Although personally I believe there are some such—in fact, I believe the average part-timer is quite as enthusiastic, though I admit he may have more common sense than the whole-timer.

Dr. Lyster's sneer that part-timers might under different conditions do good work is beneath contempt.

Dr. Lyster, again, says that the estimate of salaries is based upon present figures, and imagines that a minimum of £500 per annum would be easy of acquirement. It seems hopeless to try to convince such optimism, but what does Dr. Lyster imagine is the present value, or, rather, the present price, of medical work? And does he imagine that any body, individual or corporate, will go into the labour market and offer three times the price at which work is run after and canvassed for, often before the posts are vacant? If ten or fifteen officers could be dismissed (without compensation, of course), and their posts combined to effect a saving, no doubt £300 or even £500 would be offered for one man to do all their work. This, too, would be not only a proper spirit of municipal expenditure, but a splendid example of true medical brotherhood! Even this seems utopian in the light of "medical prices" which the correspondence between Dr. Duke and the Wandsworth Council, published in this week's JOURNAL, exposes.

As Dr. Lyster proceeds with his letter he "lets himself go," and in his replies to "M.O.H." leads one to suppose that he is in sympathy with a whole-timer who, having secured a good post himself, promptly impresses a body of "local assistants" to do his work—these, not the local assistants, but the whole-timer, doubtless being the "strong organizers and administrators" who could claim the senior posts. "Unco' canny they are, too."

Why should a whole-time officer to a combined district have a more secure appointment, have better pay, and a better chance of promotion than a part-timer? Could not security of tenure be given to a part-timer just as easily; could not a "scale of remuneration" be applied to public health appointments, whether the officer is whole or part time; and would not promotion be more likely to come the less the number of whole-time local assistants?

As for the recommendations of a whole-timer being more likely to be carried out, I should think that depends more on the "recommendations" than the fact of whether the medical officer was whole or part time. I know of two cases in which whole-time medical officers of health for very large districts—and good men they were, too—produced leaflets for distribution on the "feeding of infants," which made every practical general practitioner who read them smile; which means that if every medical officer of health had a few years' work as a general practitioner, *real* medical practice, he would be the better medical officer of health because he was not the worse general practitioner.

I should like to endorse my opinion of Dr. Bristowe's "argument" *re* Socialism, which is, in my humble opinion, quite as logical as the arguments of Dr. Lyster.

Dr. Lyster's last paragraph attributing to the Majority Report an attempt to exploit the medical profession seems to me to exactly describe it; only I go further, and think the Minority Report has just the same fault, only it is more diffuse, destructive, and impracticable. But I should not mind the reports so much; it is the dissensions in our own camp which are our weakness, and which let us be exploited; and when we find our own brethren advocating the deprivation of hundreds of appointments—to be given to somebody else—it makes me sad. But when these persons try to explain that we shall benefit pecuniarily, one wonders whether to weep at their "honesty" or smile at their "credulity."—I am, etc,

Northwich, Cheshire, Oct. 24th. HENRY EDWARD GOUGH.

SIR,—Although Dr. Lyster has contributed a somewhat lengthy letter in your last issue, he does not seem to have carried the subject much further. He says my use of the word "gratuitous" is misleading. I cannot help feeling this a rather gratuitous assumption, as he is evidently not misled, and there is no evidence that any one else is. On the other hand, I am justified in challenging his use of the word "obvious" as decidedly misleading. Whether he adheres to his definition of my offending word or not, it is far from "obvious," in the usually accepted meaning, that what the Minority Commissioners propose will result in the carrying out of even their expressed intentions. Again, although he repeats it twenty times, it is not "obvious" that the total remuneration from the public to the medical profession would be enormously increased. This I stated in my last letter. I would further remind him that the onus of proof is usually thrown on the one that asserts, not the one that denies, and it is no proof to state an opinion based on personal belief in the views of the Minority, even if the said opinion be preceded by the word "because." Every one is justified in having a belief, but not in saying that belief is obvious, unless he can logically prove it. I believe the Majority recommendations, except their medical scheme, are far superior to those of the Minority. At least, they recognize the necessity of a destitution authority, and have the support of the great majority of the Commissioners appointed by the Crown, including Dr. A. Downes, the only medical member of that body.

Poor Law medical officers are nearly all in agreement with Dr. Downes, who could hardly be claimed as a supporter of the medical proposals of the Minority. I hope

Dr. Lyster will study your article this week, Public Masters and Medical Servants. If he does he will scarcely even venture to think that it is "obvious" that the "minimum" salaries of Dr. Gough's staff would be £500 per annum. Personally, I am of opinion that Dr. Gough has overestimated them.

Dr. Lyster finds fault with Dr. Bristowe's statement that the Minority Report is "pure socialism." I admit that some definition should be given as to what is meant by "pure socialism." But if to grant medical, and, it is to be presumed, other relief to every poor applicant, with no "test," no "deterrent," in fact, no restraint on abuse of any kind, except the "consistent code" to enable the State to recover the cost of such relief from those "proved" able to pay, is not "pure socialism" in the ordinarily accepted meaning, it is a tolerably long step in that direction. It might even be described, in the words of a well-known Socialist M.P., speaking of another hotly-contested measure, as a "good chunk" of the socialist programme of the future.

Dr. Lyster asks about the "plums" now possessed by Poor Law medical officers. At least, a fair proportion have private practice sufficient to prevent them from being altogether dependent on their Poor Law appointments; and they would be foolish, indeed, to run the risk of losing this and their independence as well, misled by visionary notions of becoming whole-time State officers at the munificent salary of £500 per annum.—I am, etc.,

London, E.C., Oct. 23rd. MAJOR GREENWOOD.

THE CRESCENDO MURMUR.

SIR,—I fail to see that Dr. Brockbank has in any way strengthened his position by his letter in the JOURNAL of October 23rd. I may say, to begin with, that I do not consider his contention that he is able to make a peculiar noise by blowing through a piece of rubber tubing is sufficient foundation for his theory as applied to the murmur of mitral stenosis; but let that pass.

He admits that, if his view that the rising pitch of the crescendo murmur does not indicate a closing orifice, his theory collapses. He further asks me to explain how the murmur is produced under the "auricular systole" rhythm theory. I will endeavour to deal with these two points as briefly as possible, but I do not accept the term "auricular systole" theory for reasons which will be given later.

I maintain that I have ample pathological evidence that rigid and even calcified stenosed mitral orifices are found at death which could not possibly have been closed during life, and in which, previous to failure of compensation, a presystolic murmur was audible a few months or even weeks before death. That a presystolic murmur is not usually present in the final stages of mitral stenosis when compensation has utterly broken down I should be the first to admit, and that is only what I should expect.

In mitral stenosis, as a result of Nature's commonsense methods to counteract its disturbing effects on the circulation, the right ventricle comes to the rescue, and by its hypertrophy and more powerful action puts up the pressure in the pulmonary circulation, and consequently in the left auricle, which acts as an elastic reservoir like the bellows in a scent or throat spray. The blood is thus driven through the narrowed mitral orifice, as through a nozzle, with increased velocity, to make up for the diminished size of the stream. Moreover, the flow begins as soon as, or very shortly after, the ventricle relaxes in diastole, and is not dependent on the auricular systole, which in the later stages of the disease is of minor importance, or, it may be, practically non-existent. The flow of blood from the auricle to the ventricle through the narrowed orifice generates the presystolic murmur, but the high pressure in the auricle is not the only factor to be taken into consideration, nor could it account for the "crescendo" character of the murmur. The murmur is soft at first, as the velocity of the flow is not very great, but as the ventricle expands it exercises a powerful "crescendo" suction action. This induces a "crescendo" velocity of flow from auricle to ventricle through the narrowed orifice, and consequently, a "crescendo" murmur, to which the auricular systole puts the final accent before it terminates in the loud first sound.

The pressure in the left auricle is so great when reinforced during the systole of the right ventricle, that it may even resist reflux through a small but patent mitral orifice during systole of the left ventricle, so that we get no systolic murmur in many instances.

When, as happens in the final stages, the right ventricle breaks down, the pressure in the left auricle falls, and the presystolic murmur disappears entirely, as the rate of flow of blood through the narrowed orifice is insufficient to generate a murmur, the suction action of the now feebly-acting left ventricle being quite inadequate by itself to sufficiently accelerate the flow. Under these circumstances we commonly have a very irregular rhythm and a kind of delirium cordis, in which a systolic murmur or a first sound only occurs according as the ventricle completes its contraction or not. I have at the present time a case under my care in which, when the patient was admitted, there was complete failure of compensation with cyanosis, orthopnoea, enlarged liver, and slight dropsy. No presystolic murmur was audible at the apex, but only a jumble of first sounds and systolic murmurs and a very irregular rhythm. As a result of rest and treatment all the serious symptoms have subsided and she is quite comfortable. At the apex a presystolic murmur leading up to a loud first sound is now audible, but no systolic murmur, the physical signs as well as the symptoms thus indicating that the right ventricle has regained control of the situation. This is only one of many similar cases which I have had the opportunity of observing, and which afford, I think, important support to the views I have stated. I trust I have made these clear to Dr. Brockbank, even if I have not convinced him of the error of his ways.—I am, etc.,

London, W., Oct. 25th. JOHN F. H. BROADBENT.

THE CURE OF DISEASE BY INCUBATION.

SIR,—In the leading article on this subject mention is made of only one church in Britain where the custom existed. It may be of interest to know that the practice prevailed at Christ Church (a ninth century church), Monmouthshire (overlooking ancient Carleon), up to early in the nineteenth century.

Donovan, writing about 1804, graphically describes the procedure, which he unexpectedly witnessed on a visit to the church on the eve of Trinity Thursday. On "Colmer's Stone," a large, beautifully inscribed and figured tombstone, in the floor of the chancel, to his inexpressible astonishment, he beheld a young man with his nightcap on, lying on it, shivering with cold, his hands uplifted and muttering a prayer for the cure of his affliction—presumed to be "fits." "During this religious farce his friends formed a spacious circle round him, some standing, some sitting, and others kneeling, all intent on watching the countenance of the patient, to observe the progressive advancement of the miracle."

It appears that in the course of the evening a two-year old rickety child had also been placed on the stone.

The charm worked only during the night before the revel or wake, held in the churchyard on Trinity Thursday, the patients being placed on the stone about sunset to remain until sunrise. As many as forty people are said to have lain on and around the stone at a time, a leg or an arm lying in contact with it being thought sufficient to work the cure.

A local squire attempted to suppress the silly custom about the middle of the eighteenth century, but "at the hour of midnight the bells began ringing of themselves and continued to alarm the country till dawn, which convinced the squire that he had acted against the will of Heaven, and expressed his contrition for the offence."

The stone is still in a state of excellent preservation.—I am, etc.,

Cardiff, Oct. 24th. HOWELL REES.

DENTISTS AND ANAESTHETICS.

SIR,—Anent the article entitled "Dentists and Anaesthetics" which appeared in your issue of October 23rd, 1909, it may be of interest to learn that complete instruction has been given in anaesthetics to students of the Newcastle-upon-Tyne Dental Hospital and School during the past eight years.

The teaching comprises (1) systematic lectures by Dr. W. E. Alderson, Lecturer on Dental Anaesthetics; (2) chair-side demonstrations by the honorary anaesthetists; and (3) administration of anaesthetics by the students under the supervision of the anaesthetists.

During the year 1908, 601 general anaesthetics were administered, of which nitrous oxide comprised 228, and the remainder included ether alone and in sequence, and ethyl chloride. The majority of this work was carried out by students. Ample accommodation being provided, the "recovery stage" can be observed throughout. Instruction in anaesthetics is compulsory before proceeding to the diploma of L.D.S.Durham, the full dental curriculum for which is carried out at the Newcastle Dental Hospital and School.—I am, etc.,

J. T. JAMESON,
Dean, Newcastle Dental Hospital and School.

Newcastle-on-Tyne, Oct. 25th.

KENNELS AND DOGS IN TOWN.

SIR,—Your correspondent "M.D." has undoubtedly ventilated by his letter a matter of serious importance. But I would suggest he hardly carries it far enough.

The most excellent scavengers provided by the authorities in most towns do away with much of the danger to the public health due to the excreta of horses and cattle in our streets, but, as your correspondent points out, dogs have been overlooked. I would ask, in passing, Are not cats an equal danger?

But the grave danger to the health of the nation arising from the unrestricted and ubiquitous emanations of our birds has surely been overlooked by them, as well as by "M.D."

Could not means be found to train these intelligent little dwellers among us in the habits of modern civilization, or else destroy them in the public interest?

Thanking you, Sir, for opening your columns to this most burning question.—I am, etc.,

October 10th. MEDICAL J.P.

MUNICIPAL ESTIMATE OF THE VALUE OF MEDICAL SERVICES.

SIR,—It is refreshing to find that there are a few medical men who have the temerity to let municipal authorities know what they think of the contemptible offers made to them for medical services.

As a city councillor I have frequently expressed my disapproval at the manner in which they grind down medical fees, but so long as medical men can be found to do work at their price, so long will the degradation of our profession continue. The remedy lies in unionism assisted by the British Medical Association.—I am, etc.,

October 22nd. H. D.

THE REPRESENTATIVE MEETING.

SIR,—With regard to Dr. Kirby's letter in your last issue of October 23rd, p. 1256, we feel bound to state that the Central Division, the only body to which Dr. Kirby is directly responsible, has not met since the Representative Meeting, and has, therefore, had no opportunity of receiving Dr. Kirby's report, or criticizing in any way his action as representative.

We would, therefore, as officers of the Division, deprecate the premature discussion of a hypothetical position, and must regret that Dr. Kirby, with no communication with his official colleagues of the Division, should have thought it necessary to justify his action in your pages before being required to justify it to his constituents.—We are, etc.,

WALTER R. JORDAN (Chairman).
G. J. BRANSON (Vice-Chairman).
A. W. NUTHALL, W. T. LYDALL } Honorary Secretaries.

Birmingham, Oct. 25th.

AT an inquest in Southwark on October 19th on a woman who died of tetanus at Guy's Hospital, the patient was shown to have had a wound on one of her toes caused by a nail in her boot, but in the opinion of the house-physician and of the coroner the onset of tetanus was ascribable not to this cause but to the state of her gums and teeth. The house-physician pointed out that the first symptom of tetanus occurred within three days of the wound of the foot, while the minimum incubation was usually considered to be four days. A verdict of death from misadventure was returned.

Medico-Legal.

WORKMEN'S COMPENSATION.

The Home Secretary on Medical Examinations.

AT a recent meeting of the Halifax Trades and Labour Council, reference was made to a claim under the Workmen's Compensation Act made by a brass finisher. It appeared that this man had been submitted to the medical referee of this district, who gave a report against him. A complaint appears to have been made to the Home Office on the ground that the medical officer of the insurance company was allowed to be present at the examination. The following letter in reply, which was sent by the Home Office, is of interest as showing the rights of medical practitioners to attend at these examinations:

With reference to your letter relating to a case in which a workman claiming compensation under the Compensation Act was examined by a medical referee in the presence of the insurance company's doctor and solicitor, I am directed by the Secretary of State to say as regards the presence of the solicitor that as the employer in this case made application for reference of this matter to a medical referee, it was his duty to be present either in person or by proxy, as required by No. 14 of the regulations for medical referees of June 21st, 1907. The presence of an insurance company's solicitor as the authorized representative of the employer would be in order.

As regards the attendance of the insurance company's doctor, there is nothing in the regulations above mentioned to prevent either party bringing with them a medical man. Regulation 15, however, only requires that the medical referee shall, before deciding the matter, consider any statements submitted by either party, and these statements may be submitted either orally or in writing. Where a doctor is present with either party the medical referee is not obliged to hear him, but he is at liberty to question him if he thinks fit. It is not unusual, the Secretary of State understands, for both parties to attend with their medical men. The point was very carefully considered when the regulations were being drafted; and while, in the opinion of the Secretary of State, any general practice of doctors attending before the referee is undesirable, on the ground that these inquiries ought to be made as simple and inexpensive as possible, he does not think a prohibition of the attendance of medical men would be feasible.

Eye Injury.

In a case heard at Dunfermline, October 1st, a miner lost the sight of one eye in an accident on August 22nd, 1906. He returned to work without compensation, but the other eye becoming affected in January, 1909, he was awarded compensation.

"Arising out of the Employment."

In a case heard at Wigan on October 5th it appeared that an engine driver who had received his wages was handing over part of the sum received to another man on the engine, to whom it was payable. While doing this his foot slipped and he went under the engine. It was held that the accident did not arise out of the employment, as he should have handed the money back to the paymaster.

ANTINEURASTHIN.

IN October, 1908, the Board of Inland Revenue summoned Mr. William Migge, of 10, Eastcheap, for an infringement of the Medicine Stamp Act in having vended and exposed to sale a box containing a certain preparation and composition to be used and applied as a medicine and medicament for the prevention, cure, and relief of disorders and complaints incident to and affecting the human body, and liable to the stamp duty, to wit, "antineurasthin," without a paper cover, wrapper, and label showing that duty had been paid. It was stated on behalf of the prosecutors, that the defendant was the agent in this country of a widely advertised German preparation called "Antineurasthin," or "Dr. Hartmann's brain and nerve food." He had been informed by the Inland Revenue that a stamped wrapper would have to be supplied with each box. For the defence it was contended that the substance was not a medicine, but a natural nutrient composed only of organic substances not manufactured by any secret process, and in Germany classified as a pure natural food and exempted from duty. It was submitted that not only was there no evidence that antineurasthin was a medicine, but that on the analysis and descriptions of the German doctors there was strong evidence that it was a food. The magistrate dismissed the summons and subsequently, on the application of the prosecution, stated a case for the consideration of the King's Bench Division. The defendants submitted an analysis, made by P. Jeserich and Co., as follows:

"The sample submitted to me yields the following results in analysis:

"Water	3.35	per cent.
"Milk sugar	56.47	,,
"Albumen	20.86	,,
"Lecithin	5. 1	,,
"Mineral matter	4.26	,,
"Binding matter	9.96	,,

"By reason of the above analysis the preparation in question must be considered in the profoundest sense of the word as a food, and in this respect is on a par with egg substance—

that is to say, with preparations also containing albumen and lecithin."

The appeal came before the Lord Chief Justice, Mr. Justice Darling, and Mr. Justice A. T. Lawrence in the King's Bench Division on July 27th. The Solicitor-General and Mr. W. Finlay appeared for the Board of Inland Revenue, and Mr. Horace Avory, K.C., and Mr. H. J. Simmons for the respondents. After argument judgement was entered for the appellants.

The Lord Chief Justice: This case is on the very border line. One does not want to allow oneself to be influenced by the feeling that if one had been deciding the question as a magistrate one would have certainly held it to be distinctly a medicine, or to be something sold as a medicine, which is, in my judgement, the test for the purpose of taxation—that is to say, taking the words of the statute, whether it be a pill, powder, or lozenge "to be used or applied externally or internally as medicines or medicaments . . . made, prepared, uttered, vended, or exposed to sale by any person or persons whatsoever, wherein the person making, preparing, uttering, vending, or exposing to sale the same hath or claims to have any occult secret or art for the making or preparing the same, or hath or claims to have any exclusive right or title to the making or preparing the same, or which have at any time heretofore been, now are, or shall hereafter be prepared, uttered, vended, or exposed to sale under the authority of any letters patent under the great seal, or which have at any time heretofore been, now are, or shall hereafter be, by any public notice or advertisement, or by any written or printed papers or handbills, or by any label or words written or printed, affixed to or delivered with any packet, box, bottle, phial, or other inclosure containing the same, held out or recommended to the public by the makers, venders, or proprietors thereof as nostrums or proprietary medicines, or as specifics, or as beneficial to the prevention, cure, or relief of any distemper, malady, ailment, disorder, or complaint incident to or in any wise affecting the human body." I think it is quite impossible to read the statements in the pamphlets that were sent out, or, I think, the description in the words upon the box itself, without coming to the conclusion that it was sold as being a preparation to be used internally, in order to cure the ailments or certain ailments of the human body. But it is said against that view by Mr. Avory that the magistrate has dealt with this as a matter of fact, and that it is to be regarded as a question of fact in each case, and, for the purpose of enforcing that argument, he cited a case which is reported in 60, *Justice of the Peace*, where in connexion with pine soap it was held by Chief Justice Russell and Mr. Justice Wright that the article in that case had been found by the magistrate not to be a medicine. It is a very meagre report of that case, and I cannot think that there was in that respect the same kind of material as is before us. But I doubt very much whether the magistrate meant to hold it as a question of fact in the ordinary sense of the word. I think he has stated it in a way which shows that he meant to say that on the facts proved before him there was not evidence that it was a medicine, or a chemical, or officinal preparation to be used as a medicine. He says: "I was of opinion, on the facts proved before me, that antineurasthin was not a medicine or medicament." I rather agree with the learned Solicitor-General that that means, "On the facts proved before me it was not as a matter of law to be treated as a medicine coming within the schedule." Under these circumstances, it seems to me that we must deal with the matter upon the facts stated by the magistrate, and must express our opinion, as we are entitled to do unless we are precluded by the finding of fact of the magistrate, upon the facts which were before him. That is now the practice of this court in all cases in which we are entitled to draw the inference that the magistrate ought to have drawn. I have already said that we cannot read the literature, and we cannot read the description of this article without coming to the conclusion that it really was put forward as a curative preparation against diseases. It is true that many times in the literature of the pamphlets and the notices they indicate that it takes the place of a medicine because it is in the nature of a food; but I cannot think that, simply because it is suggested that it will do the same work as medicines, it is not a preparation of the kind indicated or contemplated as being liable to taxation by the statute. Then, Mr. Avory says, they tell you what it is: it consists of water, milk, sugar, albumen, and lecithin—which, we are told, is the yolk of an egg—of binding matter, and of some mineral matter, which may or may not be salt; it is not stated it is salt—it might be iron or something like that. It seems to me a lozenge of that kind might very likely be a tonic, and a tonic intended to be taken, it may be in the place of food or in food or with food, and might and ought properly to be regared as being a medicine which would, if it has the properties, effect the beneficial results spoken of. I am also impressed by the fact, which was practically admitted by Mr. Avory, that it cannot be suggested that you can live upon this, although you may take more of it, because it has the properties of food. Therefore it seems to me, upon the whole, as the magistrate has not found as a fact, but has only said upon the facts proved he thought it was not a medicine, we ought not to take that view of the law, but ought to hold that on the facts proved the article came within the taxing clause, construing it quite strictly, and that this appeal should therefore be allowed.

Mr. Justice Darling: I am of the same opinion. This preparation—Antineurasthin—is called, "Dr. Hartmann's Brain and Nerve Food," but, in my opinion, a thing which really is food is quite capable of requiring to be treated as liable to duty within the sections of these Acts of Parliament of 42 George III, chapter 56, 44 George III, chapter 98, and 52 George III, chapter 150, which are the statutes governing the matter. It seems to me that you have not to decide whether a thing is a food or is a medicine. Food may be a medicine, and a medicine may be a food; it all depends upon how they are administered. What the statute says is, "if any person or persons shall utter, vend, or expose for sale or offer or keep ready to sale any box" so and so, "containing herbs, pills," and so on, as nominated in the schedule, then he shall require to pay a duty "and also," says the schedule, after naming a lot of things, "all other pills, powders," etc., "to be used or applied externally or internally as medicines or medicaments." I think that if you did apply simple plain water or bread as a medicine or medicament and offer it for sale as such, you would come within the meaning of this statute. It then must be applied as "medicines or medicaments for the prevention, cure, or relief of any disorder or complaint incident to or in any wise affecting the human body." The section goes on and it is not clear, because it speaks of an occult process, and then there are a lot of "or" this, "or" that, "or" the other thing, and I think each of those words must be read as being disjunctive. If you do that you come to this passage: "or which" that is which drugs or things "have at any time heretofore been, now are, or shall hereafter be by any public notice or advertisement, or by any written or printed papers or handbills"—I skip words—"held out or recommended to the public by the makers, vendors, or proprietors thereof as nostrum or proprietary medicines, or as specifics, or as beneficial to the prevention, cure, or relief of any distemper, malady, ailment, disorder, or complaint incident to or in any wise affecting the human body." Now these things have been advertised and held out. In this little book they are held out on page 8 as being a cure for headaches and neuralgic pains; they are, therefore, within these words about the relief of a malady, ailment, disorder, or complaint incident to or in any wise affecting the human body. I think that these various parts must be read disjunctively, because I see these words—"for the prevention, cure, or relief of any disorder or complaint incident to or in any wise affecting the human body" are twice repeated in the course of this schedule. Therefore, I think one branch of it comes to an end where they are used the first time, and that the rest of it comes to an end when they are used the second time, and that in the second half there are a number of cases provided for which brings the thing within the Act of Parliament, and among other things provided for is where it is held out or recommended by papers, handbills. or advertisements as having these curative effects. I think, therefore, the magistrate was wrong in the opinion to which he came. It was nothing but an opinion. It does not profess to be a finding of fact. It is simply stated in so many words that it is an opinion, and therefore I think that we have to look at what the statute means, and as I read it there was ample evidence before him which should have brought him to the conclusion that this was not advertised, and held out and offered for sale as a food, but was advertised and offered for sale as a medicine, and therefore the appeal should be allowed.

Mr. Justice A. T. Lawrence: I have had some doubt in this case, but I have come to the conclusion that I must agree with the other Judges of the Court that the magistrate, in so far as he has found a fact, has found it contrary to the evidence. The tablets in question are, it is true, called in one part of the advertisement a food, but that is only a brain and nerve food. It does not suggest that they are a food in the ordinary sense of the word, and when you look at the analysis, though the analysis shows that a great many of the things contained in the tablets are the component parts of ordinary food there is one thing of which that is not true, namely, "mineral matter, 4.26 per cent." The analysis leaves the thing quite open to this being a medicine in the strict sense of the word. The box itself uses the words: "Usual dose from three to four tablets," and "To be taken between meals." Therefore, it is not a food in the ordinary sense, but it is something to be taken for the brain and nerves and as a cure for neurasthenia. "Antineurasthin" it is called, and the box contains the words on two sides of it: "Prescribed by eminent physicians." Now I think the fair interpretation of that description is that it is a medicine, and is meant to be taken as a medicine between meals, and not that it is a food in any of the ordinary senses. Then when you look at the Act of Parliament dealing with this tax, it certainly contains the widest words and language amply sufficient to include this preparation within its limits, and I think the appeal should be allowed.

Mr. W. Finlay: The appeal will be allowed with costs, and sent back to the magistrate with a direction to convict.

The Lord Chief Justice: Yes.

An analysis of the substance was made for the British Medical Journal, and published in the issue of February 27th, 1909, p. 544. On the results of the analysis the conclusion was drawn that antineurasthin was composed as follows:

Dry yolk of egg	3.8	per cent.
Dry white of egg	5.4	,,
Dry separated milk	57.8	,,
Gum	2.0	,,
Potato starch	22.7	,,
Moisture	8.3	,,
Aromatic substances	Traces.	

A further reference to this matter will be found at page 1298 of this issue.

SUICIDE BY VERONAL.

In a case of poisoning by veronal investigated in the Coroner's Court in Paddington on October 23rd, the jury returned a verdict of suicide while insane, adding a rider to the effect that veronal when sold in tablet form should be scheduled under the Sale of Poisons Act. The medical witness gave evidence to the effect that when summoned to the deceased, a woman aged 45, he found her suffering from an overdose of veronal. He gave her antidotes but she only lived to the following day, death being due to heart and respiratory failure. The bottle from which the veronal was taken had contained twenty-five tablets of 5 gr. each. The direction for use printed on the bottle stated that three tablets could be taken, a recommendation which the witness himself would be chary of giving. These tablets, he said, were prepared in seductive form, and were on sale without restriction by chemists. The public seemed to think that they could take any number of them with safety. Accidents with veronal seemed to be on the increase.

SOLICITORS AND THE PAYMENT OF FEES.

Brighton writes (1) that he was requested to attend court to give evidence in a case by a firm of solicitors. On his agreeing to do so for a fee of 10 guineas a day, his condition was accepted in writing by the firm in the name of their client. He attended by request on two days, but had only been able to get his fee for the first day. Ought he to sue the solicitors, or their client? (2) He also has an account against the executor of a patient. The former is a solicitor, and has taken no notice of his account, and he thinks his patient may have died insolvent. Has he any means of compelling the executor to give him any information?

*** (1) The client alone is responsible for his fee. (2) He can sue the executor, who would then be compelled to give an account, but it must not be forgotten that the law allows an executor twelve months to carry out his duties. A search at Somerset House would inform our correspondent what assets his patient died possessed of.

Medico-Ethical.

The advice given in this column for the assistance of members is based on medico-ethical principles generally recognized by the profession, but must not be taken as representing direct findings of the Central Ethical Committee.

A.—The business of a Division must be conducted in accordance with the by-laws and regulations. If our correspondent alleges that they have been violated, the investigation of the allegation would, we apprehend, fall within the province of the central Organization Committee.

FEES FOR ATTENDANCE ON THE FAMILIES OF MEDICAL PRACTITIONERS.

Puzzled writes: A country practitioner, A., breaks down in health, and after a long and serious illness goes to the seaside to convalesce. While there his wife is taken ill, and he asks one of the local practitioners, B., to attend her. This attendance lasts about a week. B. subsequently sends to A. an account charging for visits at the usual rate. Is it customary for one practitioner to charge for attendance on another practitioner's wife?

*** It is not customary for one practitioner to charge for attendance on another practitioner's wife, especially in the case of a neighbour, but there is no absolute rule which exempts a member of the medical profession from his liability to pay fees for professional services rendered to him or his family by a brother practitioner

Universities and Colleges.

UNIVERSITY OF CAMBRIDGE.

The number of students who have entered this winter with a view to obtaining medical degrees is 110, or a little less than 11 per cent. of the total number of freshmen. The average during the past five years has been 112.5.

UNIVERSITY OF LONDON.

King's College.

Special Lectures in Physiology

The course of lectures on the pineal and pituitary bodies to be delivered in the Physiological Laboratory, King's College, commences on Monday next. Professor Halliburton, F.R.S., will lecture on the pituitary body on Mondays, November 1st, 8th, and 15th, at 4.30 p.m., and Professor A. Dendy, F.R.S., will lecture on the pineal body and Reissner's fibre on Mondays, November 29th, December 6th and 13th, at 4.30 p.m. The course is free to all members of King's College, to all students of medical schools in London, to all internal students of the University of London, and to medical practitioners on presentation of their cards.

UNIVERSITY OF BIRMINGHAM.

Honorary Degrees.

Many distinguished persons were presented with honorary degrees at the Degree Congregation on October 20th. Among them were the following medical men, each of whom was introduced to the Vice-Chancellor by Sir Oliver Lodge, who prefaced each presentation with a short address setting forth the distinctions of the candidates.

Mr. H. T. Butlin was introduced as follows: "The President of the Royal College of Surgeons of England, Consulting Surgeon to St. Bartholomew's Hospital, and Member of the Senate of the University of London, is a special authority on malignant diseases and on the operative surgery connected therewith. In clinical pathology he may be regarded as continuing the work of Sir James Paget. As a most distinguished surgeon, who has attained to his present high position with the acclamation of the whole medical profession, I present to you Henry Trentham Butlin."

Dr. J. S. Haldane received the following eulogy: "To the distinguished scientific investigator, Reader in Physiology to the University of Oxford, subterranean workers throughout the world, and among others the Mining Department of this university, owe much for his researches into the effect of poisonous gases on the human system. These investigations, some of them conducted at great personal danger, have helped to elucidate problems of ventilation generally, have ameliorated the lot of marine divers and workers in caissons, and have contributed to the success of efforts in mine rescue work. Men are alive to-day who owe their health and safety to the researches of John Scott Haldane."

Sir Richard Douglas Powell was introduced as follows: "The President of the Royal College of Physicians, Knight of Grace of the Order of St. John of Jerusalem, Physician-in-Ordinary to the King, is well known for his reseaches and publications, especially on consumption and diseases of the lungs and pleura. Eminent as a practitioner, and greatly esteemed by the profession for his high character, amenity, and courtesy, his name is indeed well known in the British Isles—Sir Richard Douglas Powell."

Mr. C. S. Tomes was presented with the following address: "Nominations by the Faculty of Medicine would not be complete without a representative of that profession for which we in Birmingham take a pride in specially preparing, and in which we give special degrees—namely, the profession of dentistry. Accordingly, I have to present to you one of the most distinguished of the dental surgeons of England, renowned for his researches in dental comparative anatomy and development, Fellow of the Royal Society, and Past-President of the Odontological Society of Great Britain,—Charles Sissmore Tomes."

Dr. Windle was introduced with the following address: "The President of University College, Cork, well known to us here as first Dean of our Medical Faculty and Professor of Anatomy, is a skilled antiquarian and topographer, specially learned in the antiquities of the Midland district of England. As one who laboured hard and efficiently for the good of the medical school in this city—one who superintended its incorporation with Mason College, and ultimately with the university; as a strong man of affairs, a great organizer, whose influence still lives with us in various forms—a man highly esteemed and respected by his colleagues, I present to you Bertram Coghill Alan Windle."

The following were also presented with honorary degrees: Mr. W. N. Atkinson, the Right Hon. A. J. Balfour, the Bishop of Birmingham, Professor Bosanquet, Mr. Andrew Carnegie, Sir William Crookes, Mr. Maurice Fitzmaurice, Sir Archibald Geikie, the Right Hon. R. B. Haldane, Dr. Rendel Harris, Sir Charles Holcroft, Mr. G. J. Johnson, Sir Alexander Kennedy, Sir Joseph Larmor, the Right Hon. Walter Long, Professor Gilbert Murray, Sir William Ramsay, Lord Rayleigh, Professor Rutherford, Dr. Arthur Shadwell, Mrs. Sidgwick, Lord Strathcona, Professor Silvanus Thompson, Professor W. A. Tilden, Sir Joseph J. Thomson, Dr. T. H. Warren, Viscount Wolverhampton, and the Chancellor of the University (the Right Hon. Joseph Chamberlain), *in absentiâ*.

In the evening a conversazione was held in the new buildings of the university, and the gathering numbered over 1,200 persons. The guests included the distinguished recipients of the honorary degrees.

UNIVERSITY OF EDINBURGH.

University Court.

Inductions.

At a meeting of Edinburgh University Court on Monday, October 18th, the Senatus reported that Mr. John Hepburn Millar, M.A., Professor Arthur Robinson, M.D., and Mr. Henry Alexis Thomson, M.D., B.Sc., F.R.C.S.E., had presented their commissions as Professors of Constitutional Law and Constitutional History, Anatomy, and Surgery respectively, and had been duly inducted as members of the Senatus Academicus.

Appointment.

The Court, after consultation with the Senatus, appointed Professor Alexis Thomson a University Lecturer and an Examiner in Clinical Surgery for the current academical year.

Recognition of Teachers.

The following applications for recognition for purposes of graduation in medicine under Ordinance No. 16 were granted: (1) Miss V. L. Gibbons, B.A., M.C., Huguenot College, Wellington, South Africa (chemistry—intermediate lectures and

laboratory work and B.A. lectures and laboratory work); (2) John W. Struthers, M.B., Ch.B., F.R.C.S.E., Edinburgh (Surgery).

Anatomical Department.

Professor Robinson was appointed Curator of the Anatomical Museum. It was reported that the late Professor D. J. Cunningham had by his trust disposition and settlement directed his trustees to make over all his medical and scientific books to the University of Edinburgh to form the nucleus of a library for the anatomical department.

The Chair of Surgery.

Intimation was made that the managers of the Royal Infirmary had resolved to allocate two wards and an operating theatre for the use of Professor Alexis Thomson.

Conferment of Degrees.

At a special graduation ceremony on October 23rd, the degree of M.D. was conferred on D. J. Guthrie, and that of D.Sc. in Public Health on E. D. W. Greig, Captain I.M.S.

UNIVERSITY COLLEGES IN IRELAND.

The commissioners under the Irish Universities Act, 1908, have recently made a number of appointments to the University Colleges in Dublin and Cork.

DUBLIN.

Among the professors appointed are the following: Dr. E. P. M'Loughlin, anatomy; Mr. J. S. M'Ardle, surgery; Dr. B. J. Collingwood, physiology and histology; Dr. E. J. M'Weeney, pathology and bacteriology; Dr. J. M. Genan, hygiene and medical jurisprudence; Dr. Martin Dempsey, materia medica and therapeutics; Sir Christopher Nixon, M.D., medicine; and Dr. Alfred Smith, midwifery and gynaecology.

Among the lecturers appointed are: Dr. L. Werner, ophthalmology; Mr. J. L. Potter, L.D.S., dental mechanics; and Mr. E. Sheridan, F.R.C.S., L.D.S., dental surgery.

CORK.

At University College, Cork, there are not many changes in the medical school; the Chair of Anatomy has fallen to Dr. D. P. FitzGerald owing to the resignation of Dr. Windle; the lecturer in pathology, Dr. A. E. Moore, has been promoted to be a professor of the same subject, while the Chair of Zoology and Botany has been divided, and Major H. Cummins, M.D., R.A.M.C.(ret.), has been appointed the first professor in botany.

UNIVERSITY OF DUBLIN.

The following candidates have been approved at the examinations indicated:

PRELIMINARY SCIENTIFIC (*Physics and Chemistry*).—T. Allen, R. A. Flood, R. H. Jones, W. Foot, J. Harvey, J. W. C. Stubbs, J. A. MacMahon, R. C. Lowe, H. C. D. Miller, H. W. Browne, Kathleen D. Wallace, Eleanor Taylor. (*Botany and Zoology*).—A. G. Varian, J. T. M'Cullagh, G. S. M'Conkey, J. Harvey, E. Bantry White, Hilda M. B. Marsh, F. R. Sayers, M. J. Ryan, B. Sheridan, F. A. Sparling.

INTERMEDIATE (*Part I*).—W. O. W. Ball, W. P. Croker, W. Crane, Jane F. Colquhoun, M. Horan, Marjory Chapman, C. F. Judd, J. N. G. Nolan, F. V. Agnew.

UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE.

The annual meeting of the Court of Governors of the University College of South Wales, etc., was held in the Drapers' Library of the new college on October 21st. Dr. W. T. Edwards, who presided, called attention to the fact that this was the first meeting in that noble building. It had been hoped the President would have been present at the first meeting, but he had telegraphed to express his regret that he was unable to attend. Votes of condolence were passed with the family of the late Mr. Lewis Williams (Vice-President) and with the relatives of the late Alderman R. W. Jones, M.D., J.P., Penrhiwceiber.

Finance.

In the absence of the Treasurer, the Registrar read his annual report, in which it was stated that it would be extremely difficult to make a forecast of what the financial position was likely to be in the forthcoming year. The balance sheet showed that there was a deficit in the general income account for the past year of £1,450, £150 in excess of the deficit in the previous year; and in addition to this there was a deficit on the cookery school of £66, as compared with £495 in the previous year. The new college buildings would entail a very much larger expenditure for up-keep than hitherto; the registrar estimated it at £1,000. The deficit was not due to any falling off in activity. There had been a very satisfactory increase in the fees received from students, and the Board of Education grants had been increased by £500, but the taking away of the technical instruction had entailed a considerable loss; bank interest had increased by £115. Through the great generosity of Viscount Tredegar and others, a sum amounting to about £11,000 had been promised during the last twelve months towards the building and furnishing fund; but this, together with the earmarking of the sustenation fund of £15,000, would be insufficient to cover their actual building debt, and make provision for sustentation by about £9,000. There was a deficit of £8.800 on the general account. This, with over expenditure going on at the rate of £2,000 a year, and a probable increase of £1,000, looked black enough. The leakage at the cookery school must be stopped, and unless some public bodies were prepared to take over the responsibility, or some other scheme devised, the school, successful as it was, must be closed to relieve the deficit to that extent. A certain amount of the new college fund promised five years ago had not yet been actually received—about £3,000 was still outstanding—and he earnestly appealed to donors who had not yet made good their benevolent intentions to consider the financial position. Dr. W. T. Edwards, Vice-President, moved that the report of the Treasurer be adopted, and Principal E. H. Griffiths, in seconding, said that, although the report represented matters in a gloomy light, he thought that more assistance was likely to be received in the future than in the past. The college had about £20,000 invested funds which it did not possess a few years ago, and though that would not help it in its present difficulties, it would materially assist to diminish the deficit, for the funds were invested in such a way that they would bear fruit a hundredfold in the future. The report was adopted, and the Treasurer was unanimously re-elected.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

Election of Fellows.

At a meeting of the College on October 19th the following gentlemen were elected Fellows: A. Allan, Glenalmond; R. B. Anderson, Winnipeg; W. E. Barrett, Colwyn Bay; O. Carlyle, Edinburgh; A. E. Chisholm, Edinburgh; R. L. Daly, Johannesburg; E. N. Drier, Vancouver; C. G. Edmonston, Portobello; M. S. Fraser, Edinburgh; J. D. Harmer, Exeter; R. H. Jamieson, Edinburgh; J. Kirkwood, Captain, I.M.S.; J. McCulloch, Ontario; A. C. B. McMurtrie, Edinburgh; H. M. Moran, Sydney; J. Murdoch, Shettleston; F. P. Patterson, Quebec; F. E. Price, Ipswich; V. H. Roberts, Captain, I.M.S.; W. Tarr, Captain, I.M.S.; R. Telford, Vancouver; J. A. Thwaits, Johannesburg; F. H. Wallace, London, N.E.

ROYAL COLLEGE OF PHYSICIANS IN IRELAND.

Appointment of Officers.

At the annual meeting of the college on October 18th, Dr. A. J. Horne was elected President for the ensuing year; Dr. MacDowel Cosgrave, Vice-President; Sir W. J. Thompson and Drs. Tweedy, Coleman, and Cosgrave, Censors; Dr. H. T. Bewley, Treasurer; Dr. James Craig, Registrar; and Sir John Moore, Representative of the College on the General Medical Council. As King's Professors of Midwifery, and of Materia Medica and Pharmacy in the School of Physic, were appointed Dr. Henry Jellett and Dr. W. G. Smith respectively. The annual dinner of the college took place the same evening.

SOCIETY OF APOTHECARIES OF LONDON.

The following candidates have been approved in the subjects indicated:

SURGERY.—*†N. B. Benjafield, *H. S. Brown, †M. Graves, †*A. W. Hansell, †J. A. Jones, †*E. Newhouse, *S. K. Poole, *S. H. Scott, †*G. Tate.

MEDICINE.—†*H. E. Battle, *H. S. Brown, *B. Robertshaw, *S. H. Scott, †H. Stanger, *J. W. Williams.

FORENSIC MEDICINE.—H. E. Battle, E. G. Brisco-Owen, H. S. Brown, F. F. L. How, B. Robertshaw, H. Stanger.

MIDWIFERY.—C. S. Foster, A. W. Hansell, D. M. Hunt, A. H. Rich.

† Section I. * Section II. †* Sections I and II.

The diploma of the society has been granted to Messrs. N. B. Benjafield, H. S. Brown, B. Robertshaw, S. H. Scott, and G. Tate.

The Services.

INDIAN MEDICAL SERVICE.

Station Hospital System.

A SENIOR MEDICAL OFFICER, I.M.S., writes:

1. The whole question of efficiency and economy rests in the introduction of the station hospital system for native troops. The present regimental system is absurd more especially for senior I.M.S. officers, who in many cases have to serve under commanding officers considerably junior to them. The commanding officers like the regimental system because they like to have their medical officers entirely under their control, receive large subscriptions, band, mess, entertainment, rifle, and sports funds, which are all paid on percentage of pay and allowances, and also have their "doctors" to run their mess as secretary. I acknowledge that the majority of junior officers like it; but as three-quarters go eventually into civil employ, and the remaining quarter who elect to remain in military service have not sufficient foresight to see the anomalous position they occupy as a regimental medical officer. The regimental system would have been abolished many years ago if the commanding officers had not stuck out and General Sir B. Duff, Chief of the Staff, championed them at Simla. I therefore hold—and *all* senior medical officers of the I.M.S. agree with me—that the only efficient system for Indian troops is the station hospital system.

2. The pay of the senior I.M.S. compares very unfavourably with the corresponding ranks of the R.A.M.C., who, in addition to getting better grade pay (Lieutenant-Colonel R.A.M.C. Rs.1,150, Lieutenant-Colonel I.M.S. Rs. 950), get a charge allowance

according to number of beds (see BRITISH MEDICAL JOURNAL, August 28th, 1909, page 578).

3. Senior medical officers I.M.S. according to recent ruling, Army Department Letter, No. 863A, dated March 9th, 1909, have all the administrative work of the station, detailing medical officers and hospital assistants for various duties, looking after the sanitary condition of the station, is responsible for the general health of troops, sick in hospital, etc. He has to do all this without a penny extra pay, but the Government of India will not sanction even a clerk for the senior medical officer's office. A hospital assistant is generally detailed who helps in addition to his medical duties, and needless to say the hospital assistant does not draw any extra pay for doing the clerical work in the senior medical officer's office.

4. A very great grievance amongst those who have elected to remain on in military service is the supersession (by officers who have done most of their service in civil employ) when a military principal medical officership falls vacant. One cannot expect them to know the rules and regulations, which they have left for eighteen to twenty years.

5. I feel sure the Government of India would retain the services of the senior I.M.S. men on the military side for a longer period if it was not for the regimental system. At present they go as soon as they can. Given the station hospital system proper staff, it would give the I.M.S. in command a good position and moreover interesting administrative work, perhaps command allowance, and no subscriptions to pay towards regiments.

ROYAL ARMY MEDICAL CORPS.

LIMITED TENURE LEAVE.

THE Government of India have decided that officers of the Royal Army Medical Corps holding executive staff appointments in India of limited tenure are eligible for leave under the provisions of Paragraph 226 of the Army Regulations in India, vol. ii.

Public Health AND POOR LAW MEDICAL SERVICES.

MEDICAL INSPECTION AND THE POOR LAW.

L. B. writes that a school medical officer has ordered a pauper child to have its enlarged tonsils removed, and that the child has gone to him, as Poor Law medical officer for the district, for the operation. He asks us whether he can obtain a fee from the guardians.

*** If the school medical officer has ordered the tonsils to be removed he has gone beyond his powers, but in all probability he has contented himself with recommending the parents to have the operation performed. However this may be, he has no power to order the Poor Law medical officer to operate; the decision as to the advisability of operating or not rests with the Poor Law medical officer in the ordinary course. Unless the child was under our correspondent's medical care at the time, he would only be bound to give medical attendance to it on receipt of a proper medical order from the relieving officer. Our correspondent may, however, have entered into a contract to attend all paupers on application; if so he cannot refuse to attend the child. In any case if he considers an operation desirable he must not delay it on the ground that he may not receive a fee. We consider that he ought to be able to obtain a fee for this special duty.

Obituary.

JOHN HERBERT WELLS, M.B., B.S.LOND.,

ASSISTANT, INOCULATION DEPARTMENT, ST. MARY'S HOSPITAL, LONDON.

THE death of Dr. John Herbert Wells occurred on October 14th, and we record the event with much regret. It brings to a close a life of great promise. Dr. Wells, who had still to complete his 30th year, was born in Leicester, and, early making up his mind to join the medical profession, passed the matriculation and preliminary scientific examinations of the London University while still at school. He then competed for the Huxley Scholarship at Charing Cross Hospital and for a Natural Science Scholarship at St. Mary's Hospital, and, gaining both, elected to join the latter institution, where some of his old school-fellows were already at work. In due course he became in 1903 M.R.C.S., L.R.C.P., and in the following year M.B., B.S.Lond., his student career being one of distinction. For physiology in particular he showed such aptitude that while still a student Dr. A. D. Waller associated him with himself in some studies which he was then carrying on, and which formed the ground work of a report made to the Chloroform Committee of the British Medical Association. His co-operation, indeed, was formally recognized, and was continued in connexion with subsequent work by Dr. Waller on the quantitative administration of chloroform. Meantime John Wells, besides serving a term of office as House-Physician at St. Mary's, holding certain minor appointments in the school, and gaining the prize for clinical medicine, had been adjudged *proxime accessit* for the Cheadle gold medal at the same institution, and had taken honours in medicine and pathology at the final M.B.

After a short period of private practice in Ealing, he joined the department of therapeutic inoculation at his old hospital in 1906, and speedily became one of its director's most trusted assistants. It was while thus working that he contracted his fatal illness. It was obvious from the beginning that it was due to an infective organism, but for some time it was not clear with what organism he had inoculated himself. Later on the disease was identified as internal glanders, an external case of which in a lady had recently been treated by him, and treated successfully. When a local symptom at length appeared it was a swelling in the calf, which was followed by evidence of a corresponding focus in the spleen. Vaccine treatment was adopted, and little by little the symptoms so far cleared up that in the autumn of last year he was able to go into the country for a time. On his return things went fairly well until about Christmas, when after a walk of unaccustomed length the swelling in the leg returned. It was opened in February, the *B. mallei* being found in pure culture. This abscess healed rapidly enough, but severe constitutional disturbance, including neuralgia in the groin, shoulder, and renewed splenic pain followed, and were not materially improved by a repetition of the vaccine treatment. He was then again moved to the country at his own desire. From the middle of the summer onwards it was obvious that he was a dying man, and about a fortnight before his death the infection became generalized, foci appearing in the face, limbs, and other parts. In the circumstances his death should be regarded, perhaps, in the light of a happy release, but it cannot but be a matter for general regret. He had already done more than is achieved by most young men of his age, and by general acceptance was likely to contribute materially to the progress of pathology, while those who knew him personally must inevitably feel the loss of a friend possessed of such attractive qualities as those of Dr. Wells. Though singularly fortunate in his domestic surroundings and the father of two young children, he faced things from the beginning with admirable courage; no one could have endured pain and suffering more patiently, exhibited more cheerful humour whenever free from actual pain, been ready to acknowledge his friends' attentions with more charming courtesy and to forget his own condition in his interest in their doings and welfare.

His funeral took place at Ditchling, near Brighton, on October 19th, in the presence of many friends, and his coffin was covered by wreaths from members of St. Mary's Hospital staff and other of his colleagues and acquaintances. Dr. Wells, whose marriage took place a little over three years ago, is survived by his wife and two children, with whom the deepest sympathy is felt.

BRIGADE-SURGEON WILLIAM PEARSON WARD, late of the Army Medical Department, died at Hove on September 29th, at the age of 84. He was appointed Assistant Surgeon, June 14th, 1847; Surgeon, June 26th, 1855; and Surgeon-Major, June 14th, 1867, retiring from the service February 27th, 1880. He served throughout the campaign in the Crimea in 1854–5, and was present at the affair at McKenzie's Farm, at the battles of Alma, Balaklava, and Inkerman, at the siege and fall of Sebastopol, at the repulse of the sortie on October 26th, 1854, and the assault on the Redan on September 8th; he was also present at the bombardment and surrender of Kinbourn. He had received a medal with four clasps, and the Turkish medal, and was made a Knight of the Legion of Honour.

Letters, Notes, and Answers.

BRITISH MEDICAL ASSOCIATION AND BRITISH MEDICAL JOURNAL.

The offices of the British Medical Association and of the British Medical Journal are at 429, Strand, London.

Communications respecting Editorial matters should be addressed to the Editor, 429, Strand, London, W.C.; those concerning business matters, advertisements, non-delivery of the Journal, etc., should be addressed to the Office, 429, Strand, London, W.C.

Telegraphic Address.—The telegraphic address of the EDITOR of the British Medical Journal is *Aitiology, London.* The telegraphic address of the British Medical Journal is *Articulate, London.*

Telephone (National):—
2631, Gerrard, EDITOR, BRITISH MEDICAL JOURNAL.
2630, Gerrard, BRITISH MEDICAL ASSOCIATION.
2634, Gerrard, MEDICAL SECRETARY.

ORIGINAL ARTICLES and LETTERS *forwarded for publication are understood to be offered to the* British Medical Journal *alone unless the contrary be stated.*

Authors desiring reprints of their articles published in the British Medical Journal are requested to communicate with the Office, 429, Strand, W.C., on receipt of proof.

Correspondents who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

Correspondents not answered are requested to look at the Notices to Correspondents of the following week.

Manuscripts forwarded to the Office of this Journal cannot under any Circumstances be Returned.

In order to avoid delay, it is particularly requested that ALL letters on the editorial business of the Journal be addressed to the Editor at the Office of the Journal, and not at his private house.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* British Medical Journal *are devoted will be found under their respective headings.*

QUERIES.

W. S. asks for information as to the Reform system of babies' clothing.

Tendon asks for information as to the treatment of recurring strained tendo Achillis. The femur was fractured 15 years ago, causing a shortening of a quarter of an inch. There is a slight thickening of the tendon.

Grateful writes: A. attends a large establishment and receives £110 (nett) per annum. B. acts as locumtenent for A., but does not look after A.'s general practice. What should B.'s remuneration be (*a*) per day, and (*b*) per week?

W. A. C. asks advice in treatment of a girl aged 17 who has very fine hair which is always sticky and clings together, looking greasy and unsightly, except just after washing. She has good health, but is of nervous temperament. The usual hair lotions, tonics, and change of air do not improve matters.

W. asks: (1) What form of instrument is usually employed for injecting sterilized iodoform emulsion into a tuberculous knee-joint, bordering on the second stage, where only the upper epiphyses are involved? (2) how often should the emulsion be injected? (3) what dressings are advisable? (4) would there be any constitutional disturbance or risk? (5) how long would it be safe to continue the injections before resorting to operation, and is there any special diagnostic sign to show the injections are doing no good?

Epilepsy Following Miner's Nystagmus.

B. W. writes: A coal miner recovering from nystagmus of 18 months' duration, and for which he received compensation, has within the last few months developed epilepsy. The indemnity company has stopped his allowance, alleging that they cannot pay for the latter disease. B. W. asks for information as to the association of the two diseases, and whether there is any precedent.

A Case for Diagnosis.

Dr. A. Said, M.R.C.S., L.R.C.P., L.M., late House-Surgeon and House-Physician, Kasr-El-Aini Hospital, Cairo, writes: An Egyptian of 62 years, now in very good health, told me the following story, that happened personally to him, and that seems to me rather peculiar:

Forty-one years ago, when the patient was a student in El Azlar University in Cairo, he had a mild fever. He did not think much of it, but on the next day he felt so ill that he completely lost consciousness. He does not remember anything whatever happening on that day. On the following day (the third of the beginning of the illness) he regained consciousness, and the condition was exactly the same as on the first day, namely, feeling of warmth, slight headache, general malaise, and inability to do his usual work. Soon after, directly he became a little better and began to eat, he noticed that everything tasted very sweet. He compares the sweetness to that of the small yellow and black dates commonly called in Egypt "Balah Imhat," which is a very sweet substance almost like sugar. The patient says that the sweetness was so strong that he purposely ate salt and pepper with bread to cover the taste, but this was of no use. This also tasted quite as sweet. This taste lasted for a week, till the patient was quite troubled with it. Curiously enough he did not consult any doctor for his condition, nor even for his fever, and as far as he can remember he took no medicine whatever; possibly he was given something on his second day of illness, when he was unconscious; otherwise he had nothing at all. Tasting everything as sweet as dates, the patient determined to eat these black dates themselves, the season of dates being then in Egypt. He used that for a week, during which his food consisted only of bread and dates. At the end of this week (that is, a fortnight from his recovery from the fever), the sweet taste in the mouth gradually diminished till it completely disappeared after a few days. Since then the patient never had the same thing again, and his senses are perfectly good at the present moment.

What could this fever and that peculiar strong sweet taste be? and has the fever any relation to the taste? and what disease or condition could cause such symptoms? and in what medical book or treatise could I find account of such illness or complaint?

*** We do not think that our correspondent will find an account of such an illness in any medical textbook. Influenza with perversion of taste might account for it, or it might have been relapsing fever or typhus, both of which diseases were common, and still are so, we believe, in Cairo. It is quite possible that disturbances of taste might follow these.

ANSWERS.

Treatment of Discharging Ears.

Dr. Lindley Sewell (Manchester Ear Hospital) writes: In answer to "Ear," after syringing the ear with weak boric lotion, the meatus should be filled with liq. hydrogenii peroxidi (*B.P.*), aq. destil. āā. These drops should be allowed to remain in fifteen minutes, when the ear should again be syringed, and then carefully dried with sterile wool on a small wool-carrier. If the *B.P.* liquor is used without dilution, it will, in many cases, cause severe smarting, both at the time of its application and afterwards. Hydrogen peroxide is very useful in clearing up the neglected aural discharge so frequently seen in children of the hospital class; it is essential for its successful use that there be adequate drainage from the middle ear, and this must be attained by enlarging an existing perforation if necessary, or removing exuberant granulation tissue with snare and spoon. When the disease is limited to the mucous membrane of the middle ear, and the perforation is large and so situate as to afford good drainage, the chances of arresting the discharge are great. In the later stages of treatment, after the instillation of the hydrogen peroxide, ℞ Ac. boric. gr. xv, sp. vin. rect., glycerin., āā ʒij, aq. destil. ad ʒj, may be instilled for a further ten minutes with advantage. When the suppurative process has extended to the bone, however, there is no prospect of cure from the conservative routine outlined above, and radical surgical treatment is indicated. Hydrogen peroxide will be found extremely useful at the first dressing after a radical mastoid operation; if poured freely over the gauze, it renders it loose, and there is much less pain in its removal.

Mr. Garry Simpson (London) writes: "Ear" will find peroxide of hydrogen of great use in the treatment of chronic middle-ear suppuration, and especially as a means of loosening tough masses of discharge. I use an ear-bath of liq. hydrogenii peroxidi, 5 to 10 vols., extending over a period of five minutes. The meatus should be filled with the solution, which should be first warmed in a teaspoon over a spirit lamp, the patient lying with the ear under treatment uppermost. If there is pus the meatus is filled with a whitish froth in which can be seen bubbles of gas. This treatment is followed by syringing with a warm saturated solution of boracic acid, and drying the meatus by means of a cotton-wool tip. The patient should then get rid of any additional discharge by performing Valsalva's method, by the introduction of air into the middle ear during forcible expiration with the mouth and nostrils closed, and any additional discharge must be removed by means of a cotton tip. The success of the treatment will depend a good deal upon the situation of the perforation of the drum membrane. It should be carried out by the surgeon himself whenever possible, at any rate for the first few dressings. Knowing the great risks that patients run from neglecting a chronic suppurative otitis, the surgeon should endeavour to keep in touch with these cases until a cure is effected, either by local treatment or operation.

Adrenalin in Asthma.

Dr. Craufurd Matthews (Colwyn Bay) writes, in answer to "Pulmona" (British Medical Journal, October 23rd), as follows: During the past two years I have used adrenalin in every case of acute asthma I have come across, with satisfactory results in all. My method of using it is to order a dilution of adrenalin solution and water equal parts to be sprayed into the nose with an ordinary nasal spray at the commencement of the attack. In each case in which I have used it, now 10 or 11 in number, complete relief has been

obtained within ten minutes of applying, and has continued for several hours. No case has shown signs of any untoward result, though in one case applications were necessary three or four times during the twenty-four hours for two days on several occasions.

X-RAY INSTALLATION.

X RAY asks for information as to the best up-to-date *x*-ray outfit to use in a children's hospital. The present apparatus, consisting of a 10-in. spark coil and a mercury break, necessitates exposures of five to fifteen minutes in order to obtain a moderate skiagram. A 250-volt constant current is available.

*** It is advisable in the first place to have a coil that will drive at least 20 milliampères through a fairly-soft tube. An electrolytic interrupter is necessary, but, of course, this must only be used for radiography and not for screen examinations. The Bauer air-cooled tube and the Müller heavy anticathode each has its partisans among the workers in short exposures. At the present time, however, some children's hospitals are giving up the use of the big, heavy tubes, preferring to use quite small and cheap ones, and installing such an *x*-ray generator as the "Snook" (BRITISH MEDICAL JOURNAL, 1909, vol. i, p. 96), which does away with both coil and interrupter. This, of course, necessitates a somewhat heavy outlay, but there is a distinct saving in tubes. The "Ilford" plate has a very good reputation for short exposure work.

LETTERS, NOTES, ETC.

THE LONDON POLYCLINIC.

H. D. writes: As a constant attendant at the Polyclinic, and also being engaged in general practice, I cannot too strongly remind members residing in London of the great advantage they have in such a useful institute; not a single day passes that I do not learn something new there. I look upon my attendance as a means of recreation. Consultants learn much from me outside their speciality, and have ceased to write prescriptions for my patients, being forestalled by what I have learnt from them at the Polyclinic.

A CURE FOR WENS.

DR. QUINTIN RICHARD DARLING (Eardsley, Herefordshire) has sent us the following old prescription for "a wen on the neck," which he got from a patient, and which he thinks may be of interest to collectors of curiosities: "Two drachms of millipedes, 2 drachms of nitre powder, 4 drachms of burnt sponge, 2 drachms of best eating oil. The ingredients to be made up, and take a little ball about the size of a nut and let it dissolve under the tongue every night at the decrease of the moon."

A PIN PROTECTOR.

WE have received from the patentees, Messrs. Patterson and Company, of Frederick Street, Birmingham, a specimen of a new device for robbing pins and bonnet pins of their facultative terrors. It consists of a small metal sphere with an orifice at one side, and filled with material which grips the pin point and holds it firmly. It has been sent to us as being a desirable addition to the uniform of nurses in ordinary wards, and as a means of obviating any risk of their scratching their patients with their pins when lifting or otherwise attending to them, but is also intended for use with ordinary hatpins. It would be equally effective in either case, and is much the best of the many devices which we have seen for this purpose, since it is applicable to any and every pin. Its trade name is the "Cromwell" Pin Protector, and it can be obtained, we understand, from any draper.

INVALID BABIES' HOME.

DR. C. V. CORNISH (Kew) writes: I believe I am correct when I say that there is not a convalescent home for babies under 2 years of age existing in England. That being so, I wish, through the medium of the BRITISH MEDICAL JOURNAL, to make more generally and widely known a small home for babies which has recently been started by a community of Dominican nursing Sisters at Bury St. Edmunds. I can testify to the excellence of their work, for whilst they were in London I visited the home. At that time the Sisters had charge of four small children ranging from 18 months to 2 years old. One child had been taken from the Queen's Hospital, Hackney Road, a deplorable-looking little object with infantile hemiplegia, and two other "little miseries" from the slums of Hoxton (one was living in a cellar). They were all promptly put in the garden from sunrise to sunset, and made rapid progress, and were to me a striking example of what fresh air, sunlight, and plain, simple food will do for such cases. The children became fat and rosy—pictures of health. I am glad to have this opportunity of testifying to the careful and constant personal devotion to the little ones on the part of the Sisters, who are hoping to extend their work, at present very limited as to numbers from the want of funds. They will be glad to receive infants from 1 to 3 years of age suffering from rickets, paralysis (infantile and other forms), "wasters" and convalescents from acute diseases. A minimum charge of 5s. a week is made. I hope my *confrères* will make this work known, for I feel sure that such a home is very necessary, and would probably be well supported were it known to exist. The address is: The Superioress, Home for Invalid Babies, 76, Guildhall Street, Bury St. Edmunds.

FLEAS AND CANCER.

DR. A. B. CLARKE (Highampton, Devon) writes: In an interesting article in the *Charing Cross Hospital Gazette* for May, 1902, Mr. Jas. Cantlie mentions the old superstition of the "death-swarm"—that is, when a person is about to die his decease is foreshadowed by the departure of his resident vermin. Probably this is what Mr. Nolan's patient meant. Mr. Cantlie tells a story confirmatory of the belief.

THE REPETITION OF PRESCRIPTIONS.

DR. F. W. WRIGHT (Kensington, W.) writes: A patient of mine has just related to me the following story. A near relative twenty years ago consulted a physician in Chicago for neuralgia; the latter prescribed, among other ingredients, codeine, presumably, of course, in appropriate doses for the case as it then presented itself to him. A month ago, the patient being in her usual health, somewhat suddenly died, greatly to the surprise of her friends. Inquiry brought to light the unexpected fact that for a period of twenty years she had been taking the medicine prescribed by her American physician at that time. For fifteen years the prescription has been dispensed by an English chemist in this country, the top dose being 22 grains. A not unnatural question arose in the minds of the patient's friends whether it is not an abuse of a prescription that it may be dispensed for twenty years without the occasional supervision of a properly qualified medical practitioner, and whether it may not be, in the eyes of the law, illegal practice.

"CHRISTIAN SCIENCE AND SPIRITUAL HEALING."

MR. FREDERICK DIXON (District Manager of the Christian Science Committees on Publication for Great Britain and Ireland) writes: Will you permit me as one of the "official defenders" of Christian Science to ask why the attempt to answer Mr. Paget in the press is a proof that Christian Scientists are hard hit? It seems to me that the extreme anxiety of Mr. Paget's supporters to prevent any answers getting into the press tells another tale. Every day books and pamphlets are being issued, and sermons and addresses delivered, with the avowed object of crushing Christian Science. The uninitiated person might be forgiven for imagining that all these drums and alarums proclaim anything but a certainty on the part of the opponents of Christian Science that they were winning the day. One of the opponents of Christian Science is Sir Robert Anderson, and Sir Robert Anderson, who knows human nature fairly well, has just declared that Mr. Paget's attack will inevitably add a hundred recruits to the Christian Science army for every one deserter. In one way Sir Robert's estimate is in fault. The recruits are coming in, and I do not think his figures are exaggerated, but the deserters have not yet deserted. Not one of them that I know of, nor are they likely to until Mr. Paget's "swashing" blows succeed in wounding something besides his own reputation for an ability to reason with calmness. The mantle of the defender of the faith is manifestly several sizes too large for the champion whose battle-cry is "Prayer cannot reach the cells of the liver."

*** We must leave Mr. Dixon to find such comfort as he can in the opinion of Sir Robert Anderson, whose judgement in other less-elusive matters scarcely entitles him to be regarded as an authority of any particular weight in regard to Mr. Paget's way of dealing with Christian Science. We may remind Mr. Dixon once more that a few facts authenticated as the results of surgical operations performed in public hospitals would do more towards the discomfiture of Mr. Paget and the conversion of unbelievers than any number of opinions and assertions. We should be quite content to rest the issue on Mr. Wilding's cases, provided full opportunity were given of testing his statements.

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Each additional line	0	0	6
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An average line contains six words.

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